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A MIDLAND FLORA.

IN TWO VOLUMES.

THE HISTORY OF THE

REIGN OF

CHARLES THE FIRST

A BOTANICAL DESCRIPTION
OF
BRITISH PLANTS,
IN THE
MIDLAND COUNTIES,
Particularly of those in the Neighbourhood of Alcester;
WITH OCCASIONAL
NOTES AND OBSERVATIONS;
TO WHICH IS PREFIXED
A SHORT INTRODUCTION TO THE STUDY OF
BOTANY,
AND TO THE KNOWLEDGE OF THE PRINCIPAL
NATURAL ORDERS.

BY T. PURTON, SURGEON, ALCESTER.

Embellished with Eight Coloured Engravings,
BY JAMES SOWERBY, F. L. S.

“The world seems to have discovered, that nothing about which Infinite Wisdom has deigned to employ itself, can properly speaking, be unworthy the attention of any of its creatures, how lofty soever their pursuits and pretensions may be.”—E. BOTANY, p. 1851.

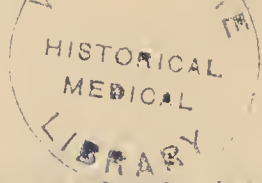
VOL. I.

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PREFACE.

THE study of Botany, has been for some years on the decline among my fair countrywomen. One cause of this may have been the terms and expressions used in systems of Botany; to which there is certainly a much stronger objection, than the harshness of their sounds to a lady's ear. It has been the author's peculiar care in the following work to remove this impediment, by studiously avoiding whatever might offend that delicacy, which is so justly the ornament of the female mind. Catching a little of the spirit of the times, he presumes to offer to the public "a reform in the study of Botany;" and hopes again to see this fascinating and very useful branch of Natural History resume a place in female education. It is now become essentially necessary by Act of Parliament, that

every student in medicine should possess a competent knowledge of Botany. The interest which a common walk in the fields receives from "the pursuits of Botany," will be considerably increased, when a lady discovers that she can assist a friend or a relative in his studies, by discovering for him the habitat of a plant, or its natural residence in its wild state.

To work a reform in the tastes and amusements of the rising generation, they must be conducted into a better channel; for the frivolous and the vain, they must be supplied with useful and interesting pursuits. Where can there be a more rational pursuit; more conducive to health, or more innocent, than the study of Botany. If the Midland Flora should add to the innocent pleasures of the rising generation, or should aid the progress of the medical student in the science of Botany, it will be a sufficient reward to the Author of the following work.

In order to acquire a thorough knowledge of any science, it is absolutely necessary that we enter

into the practical part. We must acquaint ourselves with the very minutiae of the principles upon which it is founded, or our labour will avail but little. This particularly holds good in the study of Botany. Unless the most minute attention is paid to the generic as well as specific differences of plants, those nice distinctions on which the Linnaean mode of classification is grounded; the student will soon be lost in a maze of difficulties, and may be tempted to relinquish a pursuit which appears so intricate and perplexing. However, let him not be discouraged. The more the science of Botany is cultivated, the more useful will it be to mankind. While it widens the range of human knowledge, it increases our enjoyments; and, what is of no small moment, the study of these His "lowliest works," will teach us to look up with gratitude and admiration to Him whose care is over all his works, "from the cedar that is in Lebanon, even unto the hyssop that springeth out of the wall." Thus may Botany be a means of exciting in us ideas which may lead to moral and religious consequences; and pave the way to those higher advancements in piety, which

are the very threshold and vestibule of the happiness of heaven.

I have to return my sincere thanks to my kind friend, Mr. Sowerby, for the very great assistance which I have derived from him, in the discovery and elucidation of many of the following species in the cryptogamic division; some of which are new and not described before in any Flora. He has afforded me sufficient and ample gratification, by giving them a place in his excellent publication of the English Fungi.

I also feel a sense of gratitude even to the manes of those departed Authors, from whose works I have made very liberal quotations.

To my esteemed friend and coadjutor, the Reverend W. S. Rufford, of Badsey, I consider myself under the greatest obligation; to him alone I am indebted for that assistance in my Botanical pursuits, which I shall ever consider in the most valuable light; since without his friendly and social company, and the liberty of looking over a very excellent collection of dried plants in his museum,

I should not have been able to ascertain so correctly, many of the species described in this work.

I shall take the present opportunity of thanking the following gentlemen, for their very obliging communications:—

The Rev. W. T. BREE, Allesley;
Dr. J. G. HALL, Croft, near Bridgnorth; and
W. SCOTT, Esq. Stourbridge.

T. PURTON.

ALCESTER, April, 13th.

1817.

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Withering's Botanical Arrangements, 4 vols. 8vo.
4th edition.

Woodville's Medical Botany, 4 vols. 4to. London,
1793.

ABBREVIATIONS

Used in this Work.

CL. CH. *Classic Character.*

GEN. CH. *Generic Character.*

SP. CH. *Specific Character.*

NAT. ORD. .. *Natural Order of Classification.*

SYN. *Synonym, or the same plant under
a different name.*

OBS. *Observe; Observation.*

VAR. *Variety.*

V. S. *See the Specimen or Species, in the
hortus siccus, or collection of dried
plants in my possession.**

A. *Annual.*

B. *Biennial.*

P. *Perennial.*

S. *Shrub.*

T. *Tree.*

* This reference is inserted in order to inform those who live within reach of Alcester, that they may have an opportunity of inspecting the plants themselves. My friend, Mr. Rufford, of Badsey, would grant a similar indulgence.

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INTRODUCTION.

“THE science of Botany certainly holds a very dignified station in Natural History, and not less so when we regard it as subservient to Medicine; although its utility does not terminate there. It has a relation in a variety of ways to many other arts and sciences; among which may be mentioned, the arts of Painting and Dying; but of all others Agriculture certainly claims the strictest relation, some of its most important branches being greatly dependant on it, and others, from a happy application of it, being perhaps capable of further emolument. But however great the real dignity and importance of this art, yet it must be allowed, that it has not been cultivated sufficiently on scientific principles, nor advanced in equal proportion with other branches of knowledge; but from that laudable spirit now diffusing among us, throughout these kingdoms, for the improvement of arts and sciences, under the protection of our public institutions, we may

expect to see every branch of Botany studied as it deserves, and attended with that success which commonly results from the right application of knowledge to the purposes of human life."

"The first race of shepherds had daily instances among their flocks of the selection and refusal of particular herbs, and subsequent observations must have multiplied and confirmed them. But they are still only known in the general, and no experiments have been instituted to ascertain the precise species thus eaten or rejected. The utility of ascertaining what plants are thus rejected must be evident, as it would necessarily lay the foundation of further improvement in the œconomy of all sorts of cattle. The intelligent husbandman would by this means have it in his power to rid the pastures of various useless plants, and give room for the salubrious ones. In this view of the affair it will be seen that Physicians are not the only persons who may study Botany to advantage; many others would find not only a fund of pleasure from this study, but numberless other advantages resulting from the knowledge of the plants of their own country. Science has opened the way, and surely it is not too much to say, that it evidently points to greater improvements in one of the most important branches of Agriculture, as it relates to the œconomy of cattle. More than this ought not to be expected from its aid. It is to the intelligent grazier, and the gentle-

man well versed in the knowledge of the indigenous plants, fraught with careful observation, and practiced in the œconomy of cattle, that the rest must be owing. Nothing but the want of this knowledge, in such gentlemen as reside in the country chiefly, can deprive us of the benefit which might otherwise accrue from reducing it into practice. To this end, it is indeed the province of the Botanist to make plants of his own neighbourhood particularly, the principal object of his attention. This has been eminently the case with Linnæus, and his country will continue to reap the fruit of his labours.”

“ Botany, in the utmost extent of the word, signifies a knowledge of plants, and of the uses to which they may be applied in Medicine, Chemistry, Agriculture, Œconomics, and many other liberal and mechanic arts, as well as philosophy. The word comes from *βοτάνη* herb, and that from *βοτός* of *βῶω* to feed; because most animals feed on herbs. The knowledge of this science is indisputably necessary for those who propose to apply plants to any useful purpose, which may be exemplified by supposing a Physician ever so well acquainted with the virtues of opium, and a Chemist ever so well acquainted with the method of preparing it; yet if both of them were entirely ignorant of Botany, so as to be unable to distinguish the particular species of poppy, which produce opium,

from others of the same genus, it is evident their medicinal and chemical skill could be of no use. The prerogative of this science is in its keeping together the genera, in what are called the natural classes or orders; and thus far approaches to the actual system of created nature. The more simple and uniform the classical characters are, the more they are likely to interfere in this respect; nevertheless it is pleasing to observe how well many of the natural classes are kept together in the Linnaean system; the characters of which enjoy the advantage of being very simple, and easy to retain in the memory, and being founded on the parts of plants which are hardly ever subject to variation. As a further illustration of the uses of Botany, I shall briefly consider its applications in two principal points of view, viz. to food and medicine. Many animals are endowed with an instinctive faculty of distinguishing with certainty, whether food presented to them be salutary or noxious. Mankind have no such instinct. They must have recourse to experience and observation. But these are not sufficient to guide us in every case. The traveller is often allured by the agreeableness of the smell and taste to eat poisonous fruits. Neither will a general caution not to eat any thing but what we know from experience to be salutary, answer in every emergency. If the whole science of Botany were as complete as some of its branches, very little skill in it, would be sufficient, to pre-

vent individuals from committing any fatal mistake, in collecting the different kinds of plants for culinary purposes. The advantages attendant on Botany when applied to food are truly great, and well worth the attention of every individual, be their rank or degree, age or sex, what they may; as for example; a person skilled in Botany, on perceiving the flower of a plant, whose calyx is a double valved glume, with three stamens, two pointals, and one naked seed, he can pronounce with absolute certainty, that the plant from which the flower was taken, bears seeds of a farinaceous quality, consequently they may be safely used as food. In like manner, shew him a flower, with twelve or more stamens, all inserted in the internal side of the calyx, he can with certainty pronounce that the fruit of it is wholesome food. On the other hand, shew him a plant whose flower has five stamens, one pointal, one petal, or flower leaf, and whose fruit is of the berry kind, he cannot hesitate to pronounce it to be poisonous."

"It is well worth observing, how truly the insertion of the stamens into the calyx, as in the class Icosandria, indicates a wholesome fruit. The fruits of the Pentandria Monogynia are generally dangerous, many of them peculiarly fatal. *Ribes* is an exception, indicated by the insertion of its stamens, in which, though not in their number, it accords with the Icosandria; with this simple

guide, a traveller in the most unknown wilderness, might eat in safety, and thus the natural tree of knowledge leads to life." "Facts of this kind, render Botany, not only a respectable, but a most interesting science." "When applied to medicine, the same law holds good; as it is found by experience, that plants which are distinguished by the same characters in the flower and fruit, have the same qualities, though not always in an equal degree as to strength or weakness; so that upon inspection of the flower and fruit, a Botanist can form his opinion with some confidence *à priori*, on the effects that will result when taken into the stomach. In order therefore to determine the medical virtues of all the plants belonging to a natural class, the physician has nothing to do but to ascertain by a set of clear and unquestionable experiments, the virtues of any one of them. This greatly shortens the labour of investigation, supposing the number of known species to amount to upwards of 20,000; by ascertaining the virtues of one genus, at a medium, may be determined the virtues of twelve species: but by ascertaining the virtues of one genus belonging to a natural order, the virtues of perhaps three or four hundred species are ascertained."

DES.

As a further proof of the great use of Botany, it is now made essentially necessary by

an act of parliament, that every student in medicine should be well versed in this science; and that before he can practice, he must go through an examination respecting his proficiency in the knowledge of plants.

The plan of an establishment suggested by Mr. Salisbury, of the Botanic Garden, Sloane Street, London, for promoting cottage and rural œconomy; (and if acted upon, will employ the industrious poor of this kingdom in these times of extreme distress) is truly worthy of attention; and exalts still more than ever the importance of the science of Botany.

OF THE
MOST REMARKABLE NATURAL
CLASSES.

1. *The Liliaceous Tribe of Plants.*

“You will see at the top of the stem of a lily before the flower opens, an oblong greenish bud, which grows white the nearer it is to opening ; and when it is quite open, you perceive that the white cover takes the form of a basin or vase, divided into several segments. This is called the corol, and not the flower, as it is generally termed, because the flower is a composition of several parts, of which the corol is only the principal. The corol of the lily is not of one piece ; when it withers and falls, it separates into six distinct pieces, which are called petals. Thus the corol of the lily is composed of six petals ; a corol consisting of several pieces like this, is called a polypetalous corol. If it were all of one piece, like the bell flower (*Campanula rotundifolia* Linnæi) or bind weeds, (*Convolvulus sepium et arvensis*, &c.) it would be called monopetalous. You will find exactly in the middle of the corol, a sort of little column rising from

the bottom and pointing directly upwards. This, taken in its whole, is called the pointal: taken in its parts, it is divided into three; 1. the swollen base with three blunted angles, called the germ or ovary; 2. a thread placed upon this, called the style; 3. the style is crowned by a sort of capital with three notches: this capital is called the stigma. Between the pointal and the corol, you find six other bodies, entirely separate from each other, which are called the stamens or chives. Each stamen is composed of two parts, one long and thin, by which it is fastened to the bottom of the corol, and called the filament or thread, the other thicker, placed at the top of the filament, and called anther or summit. Each anther is a box which opens when it is ripe, and throws out a yellow dust which has a strong smell; this is called the pollen or farina. Such is the general analysis of the parts which constitute a flower. As the corol fades and falls, the germ increases, and becomes an oblong triangular capsule, within which are flat seeds in three cells. This capsule considered as the cover of the seeds, takes the name of pericarp. The parts here mentioned are found in the flowers of most other plants, but in different proportion, situation and number. By the analogy of these parts and their different combinations, the families of the vegetable kingdom are determined. And these analogies are connected with others, in those parts of the plant which seem to have no relation to

them. For instance, this number of six stamens, sometimes only three, of six petals or divisions of the corol, and that triangular form of the germen with its three cells, determine the liliaceous tribe;" and in all this tribe, which is very numerous, the roots are bulbs of some sort or other. In the greater part of the liliaceous tribe, the calyx is wanting, which is a constituent part of a perfect flower; it is that outer green part of the flower usually divided into five parts, or composed of five small leaves; sustaining and embracing the corol at the bottom; and enveloping it entirely before it opens, as you may have remarked in the rose, &c. It is wanting in the tulip, the hyacinth, the narcissus, the tuberose, &c.—and even in the onion, leek, garlick, &c. which are also liliaceous, though they appear very different at first sight. You will perceive also that in this whole tribe the stems are simple and unbranched, the leaves entire and never cut or divided; observations which confirm the analogy of the flower and fruit in this family, to that of the other parts of the plants. If in the spring, you may examine the snow-drop, crocus, daffodil, crown-imperial, tulip, lily of the valley, &c. always avoiding every flower that is double."

2. The Tribe of Cruciform Flowers.

"When the first rays of spring shall have enlightened your progress, by shewing you in the

gardens; hyacinths, tulips, jonquils, and lilies of the valley; other flowers will soon catch your attention, and require of you a new examination; such are stocks (*Cheiranthus-incanus-Lin.*) and rockets (*Hesperis matronalis*,) or if these are not at hand, wall flowers, cabbage, turnip, cole-seed, mustard, &c. &c. Whenever you find them double don't meddle with them, they are disfigured, or if you please, dressed after our fashion, nature will no longer be found among them; she refuses to reproduce any thing from monsters thus mutilated; for if the most brilliant part of the flower, namely, the corol is multiplied; it is at the expence of the more essential parts, which disappear under this addition of brilliancy. Take a single stock-gilliflower, or stock, as it is commonly called, and proceed to the analysis of the flower. You will perceive immediately an exterior part, which was wanting in the liliaceous flowers, namely, the calyx. This consists of four pieces, which we must call leaves, leaflets, or folioles, having no proper names to express them by, as we have that of petals, for the pieces, which compose the corol. These four pieces are commonly unequal by pairs, that is, there are two leaflets opposite and equal, of a smaller size; and two others also opposite and equal, but larger; especially towards the bottom, where they are so rounded, as to exhibit a very sensible protuberance or bump, on the outside. In this calyx you will find a corol composed of

four petals. I say nothing of their colour, because that makes no part of their character. Each of these petals is fastened to the receptacle, or bottom of the calyx, by a narrow pale part, which is called unguis or the tail of the petal, and this spreads out over the top of the calyx into a large, flat, coloured part, called lamina or the border; the petals generally standing wide from each other, and forming a figure something like a cross, whence these corols are called cruciform, or cross-shaped. In the centre of the corol is one pointal long, cylindric, or nearly so, chiefly composed of a germ ending in a very short style, and that terminated by an oblong stigma, which is bifid, and reflected on each side. If you examine carefully the respective position of the calyx and corol, you will see that each petal, instead of corresponding exactly to each leaflet of the calyx, is on the contrary placed between two, so that it answers to the opening which separates them, and this alternate position has place in all flowers, which have as many petals to the corol as leaflets to the calyx. There are six stamens in the flower of the stock, as in the liliaceous, but not all equal; you will find two opposite to each other, sensibly shorter than the other four which separate them, and which are also separate from each other in pairs. As the corol withers and falls, which it does very soon, the germ will be perceived considerably grown in length, and thickening a little as the fruit ripens. When it is ripe, it becomes a kind of flat pod, call-

ed silique. This silique is composed of two valves, each covering a small cell; and the cells are separated by a thin partition. When the seed is ripe, the valves open from the bottom upwards, to give it passage, and remain fast to the stigma at top. Then you may see the flat round seeds ranged along each side of the partition, and you will find that they are fastened alternately to right and left, by a short pedicle to the sutures or seams on each edge of the partition. These are the essential characters of the numerous tribe of cruciform flowers, which forms an entire class in almost all the systems of Botanists. The great number of species in this class has determined Botanists, to divide it into two sections, in which the flowers are perfectly alike, but the fruits, pericarps, or seed vessels are sensibly different. The first order comprehends the cruciform flowers with a silique or pod, such as the stock; the second contains those whose seed-vessel is a silicle; that is, a small and very short pod, almost as wide as it is long, and differently divided within; as whitlow-grass, bastard cress, &c. in the fields; and scurvy-grass, horse-radish, honesty, &c. in the gardens; though the seed vessel of the last is very large, it is still a silicle, because the length exceeds the breadth very little. If none of these should be known to my readers, I presume at least, that they are acquainted with the shepherd's purse, which is so common a weed. The shepherd's purse is of the cruciform tribe, and the silicle branch of

it, and the form of the silicle is triangular. The young Botanist should also be informed that these silicles or little pods, differ much in their form; some are flat, and round or oval; others are spherical or spheroidal, and that of shepherd's purse has a form peculiar to itself. It is also necessary to give you a hint, that in this class, and in many others, you will often find flowers much smaller than those of the stock, and sometimes so small, that you cannot examine their parts without the assistance of a glass; an instrument which a Botanist cannot do without, any more than he can without a needle, a lancet or penknife, and a pair of scissors."

3. *The Papilionaceous Tribe of Plants.*

"My intention is to describe six of these natural tribes to you, in order to render the general structure of the characteristic parts of plants familiar. When peas are in full fructification, seize the moment to observe their character. They are some of the most curious that Botany affords. One general division of flowers is into regular and irregular; the first are those whose parts all spring uniformly from the centre of the flower, and terminate in the circumference of a circle. But you will see at first sight, that the flower of a pea is irregular, that you easily distinguish the longer part of the corol, which should be at the top, from the shorter which should

be at the bottom ; and you know very well, when you hold up the flower to the eye, whether it is in its natural situation or not. Thus in examining an irregular flower, whenever we speak of the top and the bottom, we suppose it to be in its natural situation. The flowers of this tribe are of a very particular structure. First, you will find a monophyllous calyx ; that is, one of an entire piece, ending in five very distinct points, the two wider of which are at the top, and the three narrower at the bottom. The peduncle supporting the calyx is very small and easily moveable ; so that the flower readily avoids a current of air, and commonly turns its back to the wind and rain. On taking off the calyx, you will see plainly that the corol is polypetalous or of many petals. The first piece is a large wide petal covering the others, and occupying the upper part of the corol ; it is called the standard or banner. We must make use of neither our eyes, nor of common sense, if we do not perceive that this petal is designed to protect the other parts of the flower, from the principal injuries of the weather. In taking off the standard, you will observe, that it is inserted on each side by a little process, into the side pieces, so that it cannot be driven out of its place by the wind ; these side pieces to which the standard adhered, are called the wings. These wings are scarcely less useful in protecting the sides of the flower, than the standard is in covering it. Taking off the wings, you discover the last

piece of the corol; this is that which covers and defends the centre of the flower. This last piece, which on account of its form is called the boat or keel, is as it were the strong box, into which nature has put her treasure, to keep it safe from the attacks of air and water. The young fruit involved in the boat or keel, is constructed in this manner. A cylindric membrane, terminated by ten distinct threads surrounds the germ or embryo of the legume or pod. These ten threads are so many filaments, united below round the germ, and terminated each by a yellow anther. If you examine more curiously, you will find that these ten filaments are united into one at the base, only in appearance; although in many species the cylinder is entire, and the ten filaments are really united into one; but in many also in the upper part of this cylinder, there is a piece or stamen which at first appears to adhere to the rest, but as the flower fades and the fruit increases, separates and leaves an opening at top, by which the fruit can extend itself, by opening and separating the cylinder gradually; which otherwise, by compressing and straightening it all round, would impede its growth. This stamen and its anther will continue to separate from the nine others, till at length they fade and dry, when the germ becomes a legume, and has no longer any occasion for them. This legume is distinguished from the silique of the cruciform tribe, by the seeds being fastened to one side only of the case, alternately

indeed to each valve of it, but all of them to the same side; you will also perceive that the legume is unilocular, or has one cell only, whereas the silique is bilocular, or with two cells. And if you take a ripe legume, it opens by the upper suture or seam, opposite to that to which the seeds are fastened; whereas the silique opens from the bottom upwards, by both sutures. What astonishing precautions have been heaped together by nature, to bring the embryo of the pea to maturity, and above all to protect it, in the midst of the greatest rains, from that wet which is fatal to it, without inclosing it, in a hard shell, which would have made it another kind of fruit. The Creator, attentive to the preservation of all beings, has taken great care to protect the fructification of plants, from attacks that may injure it; but He seems to have doubled His attention to those which serve for the nourishment of man and animals; as does the greater part of the leguminous tribe. The flowers have the name of papilionaceous, from a fancied resemblance of them, to the form of a butterfly (*Papilio*.) In some genera the boat or keel is divided longitudinally into two pieces almost adhering by the keel, and these flowers have in reality five petals; others, as clover (*Trifolium pratense*) have all their petals united, and though papilionaceous, are however monopetalous flowers or with one petal.—The papilionaceous or leguminous plants form one of the most numerous and useful tribes; beans, peas,

lucerne, saintfoin, clover, lupins, lentils, tares or vetches, indigo, liquorish, kidney beans, &c. all belong to it: the character of these last is to have the boat spirally twisted, which at first might be taken for an accident. There are also some trees and many beautiful flowering shrubs belonging to this class."

4. *Of the Labiate and Personate Tribe of Plants.*

"Among the irregular monopetalous flowers, there is a tribe, whose physiognomy is so marked, that we distinguish the members of it easily by their Air; it is that to whose flowers Linnæus has given the name of ringent; because they are cut into two lips, the opening of which, whether natural or produced by a slight compression of the fingers, gives them the air of a gaping mouth. This tribe is divided into two branches; one of labiate or ringent flowers properly so called, and the other of personate or masked flowers; the latin word, (Persona) signifying a mask. The character common to all the tribe, is not only a monopetalous flower, cut into two lips, the upper one called the casque or helmet, the lower one the beard; but also four stamens, almost in the same row, distinguished into two pairs, one longer, and the other shorter. The inspection of the object itself will

explain those characters better to you, than can be done in writing."

SECTION I.

Of the Labiate Tribe of Plants.

"The white dead nettle (*Lamium album*) bears a monopetalous labiate flower, with the casque or upper lip arched, in order to cover the rest of the flower, and particularly the stamens, which keep all four of them very close under cover of its roof. You will easily discern the longer pair, and the shorter pair; and in the midst of them the style, of the same colour, but distinguished from them by being forked at the end, instead of bearing an anther, like the stamens. If you pull out the corol, you will take the stamens along with it, these being fastened by the filaments to that, and not to the receptacle, whereon the pointal only, will remain. In examining how the stamens are fastened in other flowers, we find them generally attached to the corol in monopetalous, and to the receptacle or calyx in polypetalous flowers; so that in the latter case, we may take away the petals without the stamens. From this observation, we have an elegant, easy, and pretty certain rule, to know whether a corol consists of one piece or several. On taking off the corol, the pointal is left behind, surrounded by four

germs, which become four seeds that are naked, or without any pericarp or covering, the monophyllous or one-leafed calyx divided into five segments serving this purpose, so that the seeds when ripe are detached and fall to the ground separately. This is the character of the labiate flowers."

SECTION II.

Of the Personate Tribe of Plants.

"The other branch or section, which is that of the personate flowers, is distinguished from the former, first in not having the two lips usually open or gaping, but closed or joined. The snap-dragon (*Antirrhinum majus*) common in gardens, and the toad-flax (*Antirrhinum linaria*) a yellow flower with a spur, so common in the country, are personate plants. But a more precise and certain character is, that instead of having four naked seeds at the bottom of the calyx, like the labiate flowers, these have a capsule or case inclosing the seeds, and not opening until they are ripe, in order to disperse them. To these characters we may add, that the greater part of labiate plants are either strong smelling and aromatic, as marjoram, thyme, basil, mint, hyssop, lavender, &c.; or else strong smelling and stinking, as the dead nettles, hedge nettle, cat-mint, black-horehound, &c.; some few only have little

or no smell, as bugle, self-heal, and hooded willow-herb; whereas most of the plants with personate flowers are not odorous, as snap-dragon, toad-flax, eye-bright, louse-wort, yellow-rattle, broom-rape, ivy-leaf toad-flax, round-leaved toad-flax, fox-glove, &c. Some few of these have the mouth of the corol gaping. I know of none that have a strong smell in this branch, but the scrophularia or fig-wort, which smells strong, without being aromatic. The principal distinction between these two orders of flowers appears to be, that in the labiate the seeds are naked, and in the personate they are inclosed in a pericarp or seed-vessel; therefore the first order of the 14th class of Linnaeus include the labiate flowers; and the second order, the personate; although many of the flowers of the second order are labiate.”

5. Of the Umbelliferous or Umbellate Tribe of Plants.

“Figure to yourself a long stem pretty straight, with leaves placed alternately upon it, generally cut fine, and embracing at the base branches which grow from the alæ or the angles, formed by the leaf or branch with the stem. From the upper part of this stem, as from a centre, grow several pedicles or rays, which spreading circularly and regularly like the ribs of an umbrella, crown the stem with a

kind of basin more or less open. Sometimes these rays leave a sort of void in the middle, and represent in that case more exactly the hollow of a basin; sometimes also this middle is furnished with other rays that are shorter, which rising less obliquely, form with the others nearly the figure of a half sphere; with the convex side uppermost. Each of these rays is terminated, not by a flower, but by another set of smaller rays, crowning each of the former, exactly as the first crown the stem. Here then are two similar and successive orders; one of large rays terminating the stem, another of smaller rays like the others, each of them terminating the great ones. Linnæus calls the first the universal, and the second set the partial umbel. The first is also called a rundle, from its resemblance to the spokes of a wheel, and the second the rundlet. The rays of the little umbels are no further subdivided, but each of them is the pedicle to a little flower, of which we shall speak presently. Though this regular disposition of the fructification be striking, and sufficiently constant in all the umbellate plants, it is not that which constitutes the character of the tribe. This is taken from the structure of the flower itself, which must therefore be described. The greater number of plants, as the pink for instance, or jasmine, rosemary, sage, borage, primrose, plumb, cherry, all the ringent, cruciform and papilionaceous tribes, all the compound flowers, &c. &c. have the germ inclosed within the

flower; these are called inferior flowers, as inclosing or being below the germ. Many however have the germ placed below the flower, as in the rose, scabions, honeysuckle, currant, gooseberry, elder, pear, snow-drop, narcissus, hawthorn, apple, &c. &c.; for in the rose, the hip which is the fruit of it, is that green tumid body which you see under the calyx, and this with the corol crowns the germ, and does not envelop it, as in the former case; such are called superior flowers, as being above the germ. The umbellate plants have a superior flower. The coral has five petals, called regular, though frequently the two outermost petals of the flowers at the extremity of the umbel are larger than the three others. The form of these petals varies in the different genera, but it is usually cordate or heart-shaped; they are very narrow next the germ, but gradually widen towards the end, which is emarginate, or slightly notched; or else they finish in a point, which being folded back, gives the petal the air of being emarginate."

"Between each petal is a stamen, and the anther generally standing out beyond the corol; the five stamens are more visible than the five petals. I make no mention here of the calyx; because it is not very distinct in the umbellate plants. From the centre of the flower arise two stiles each furnished with its stigma and sufficiently apparent; these are persistent, or continue after the petals and stamens

fall off, to crown the fruit. The most usual figure of this fruit is an oblong oval; when ripe it opens in the middle, and is divided into two naked seeds fastened to the pedicle, which with an art that merits our admiration, divides into two, as well as the fruit, and keeps the seed separately suspended till they fall. All these proportions vary in the different genera, but this is the most common order. It requires a very attentive eye to distinguish accurately objects so minute without a glass; but they are so deserving of attention, that we cannot regret the trouble of it. This then is the proper character of the umbellate tribe. A superior corol of five petals, five stamens, two styles, upon a naked fruit, composed of two seeds growing together.—Whenever you find these characters united in one fructification, be sure that the plant is of this tribe, even though in other respects it should have nothing in its arrangement of the order before laid down.—In their outward appearance the elder and umbellate flowers correspond, although in fact the elder is no umbellate plant. The elder instead of five petals, has a corol indeed divided into five parts, but all of one piece. Now the flowers of umbellate plants are not monopetalous. Again the elder has five stamens, but I see no styles, and I more frequently see three stigmas than two, and oftener three seeds than two. Now the umbellate plants have never more or less than two stigmas, and two seeds to each flower. Lastly the fruit of the elder is a soft

berry, and that of the umbellate tribe dry and naked. The elder then is not an umbellate plant.

“The umbelliferous tribe is numerous and so natural, that it is very difficult to distinguish the genera; they are relations, whom we very often take for each other, on account of their great resemblance. The focus of the rays both in the larger or universal, and in the smaller or partial umbels, is not always naked; it is sometimes surrounded with small leaves. This set of small leaves or folioles is called involucre. When it is placed at the origin of the universal umbel, it is named the universal involucre; and when at the origin of the partial umbel, it is named the partial involucre.” “The same by some authors go under the name of the fence and fencelet.” “This gives rise to three sections of umbellate plants; viz. 1. those which have both involucres; 2. those which have partial involucres only; 3. and those which have neither. There seems a fourth division wanting of those which have an universal involucre only; but there is no genus which is constantly so. The flowers of most of the umbellate tribe are white, as the carrot, chervil, parsley, hemlock, fools-parsley, angelica, cow-parsnip, water-parsnip, burnet-saxifrage, pignuts, cowweed, &c. &c. Some, as fennel, dill, parsnip, have yellow flowers; there are some few with reddish flowers, but none of any other colour.”

Of the Tribe of Compound Flowers.

“Take one of those little flowers, which cover all the pastures, and which every one knows by the name of daisy. Look at it well, for by its appearance, I am sure you will be surprised, when I tell you, that this flower, which is so small and delicate, is really composed of between two or three hundred other flowers, all of them perfect; that is, having each its corol, germ, pointal, stamens and seed; in a word, as perfect in its species as a flower of the hyacinth, or lily. Every one of those leaves which are white above, and red underneath, and form a kind of crown round the flower, appearing to be nothing more than little petals, are in reality so many true flowers; and every one of those tiny yellow things also, which you see in the centre, and which at first you have perhaps taken for nothing but stamens, are real flowers. If your fingers are already exercised in botanical dissections, and you are armed with a good glass and plenty of patience, you might convince yourself of this. However, to put you at least in the way, pull out one of the white leaves from the flower; you will think at first that it is flat from one end to the other; but look carefully at the end by which it was fastened to the flower, and you will see that this end is not flat, but round and hollow in form of a tube, and that a little thread ending in two horns issues from

the tube ; this thread is the forked style of the flower, which as you now see, is flat only at top. Now look at those little yellow things in the middle of the flower, and which as I have told you are all so many flowers ; if the flower is sufficiently advanced, you will see several of them open in the middle and even cut into several parts. These are monopetalous corols which expand, and a glass will easily discover in them the pointal, and even the anthers, with which it is surrounded. Commonly the yellow florets towards the centre are still rounded and closed. These however are flowers like the others, but not yet open ; for they expand successively, from the edge inwards. You will perceive that all these little flowers are pressed and inclosed in a calyx, which is common to them all. In considering then the whole daisy as one flower, we give it a very significant name, when we call it a compound flower. Now there are many genera and species of flowers formed like the daisy, of an assemblage of other smaller flowers, contained in a common calyx. This is what constitutes the tribe of compound flowers. Let us begin by avoiding all ambiguity with regard to the word flower, which we may do in the present case by restraining it to the compound flower ; and giving the name of floscules or florets to the little component flowers ; but in the midst of this verbal precision, let us not forget, that each of these florets is a genuine flower. You have observed two sorts of florets in the daisy, the yel-

low ones, which occupy the middle or disk of the flower, and the little white tongues or straps which surround them. We shall give to the first the name of florets, and to distinguish the second, we shall call them semi-florets, or as Linnæus terms them ligulate flowers, from *ligula* a strap; for in reality they have a little the air of monopetalous flowers gnawed off on one side, and having scarcely half the corol remaining. These two sorts of florets are combined in the compound flowers in such a manner, as to divide the whole tribe into three sections, very distinct from each other. The first section consists of those which are entirely composed of semiflorets, both in the middle and circumference; these are called semiflosculous flowers, and the whole is always of one colour, which is generally yellow. Such is the common dandelion, the lettuce and sow-thistle; the succory and endive which have blue flowers, the scorzonera, salsafy, &c. &c. The second section comprehends the flosculous flowers, or such as are composed of florets only; these are also commonly of one colour; as burdock, wormwood, mugwort, thistles and artichoke, which is nearly allied to them; it is the calyx of this that we suck, and the receptacle that we eat, whilst it is yet young, before the flower opens, or is even formed. The choke, which we take out of the middle is an assemblage of florets, which are beginning to be formed, and are separated from each other, by long hairs fixed in the receptacle.—

The third section is of all flowers, composed of both these. They are always so arranged, that the florets occupy the centre of the flower, and the semiflorets the circumference, as you have seen in the daisy. The flowers of this section are called radiate. Botanists have given the name of ray, to the set of semiflorets which compose the circumference; and of disk to the area or centre of the flower occupied by the florets. In the radiate flowers, the disk is often of one colour and the ray of another; there are genera and species however in which both are alike.—Let us endeavour now to fix in your mind an idea of a compound flower. The common clover, the flower of which is purple, if you should take one in hand, seeing so many little flowers assembled, you might be tempted to take the whole for a compound flower, you would however be mistaken.—The flower of the clover, indeed, or rather the group of flowers, which has the appearance of being but one flower, seems at first to be placed upon a sort of calyx; but remove this pretended calyx a little, and you will perceive that it does not belong to the flower, but that it is fastened below it to the pedicle that supports it. This then is a calyx only in appearance; but in reality it belongs to the foliage, not to the flower; and this supposed compound flower is only an assemblage of very small leguminous or papilionaceous flowers, each of which, has its distinct calyx, and they have nothing common to them but their being fastened to the same pedicle.—

Vulgarly all this is taken for one flower, it is a false idea however, or if we must look upon it as such, we must not at least call it a compound flower, but an aggregate or capitate flower, or a head of flowers, and these terms are sometimes so applied by Botanical writers. This is the most simple and natural notion I can give you of this numerous class of compound flowers, and the three sections into which it is subdivided. I now come to the structure of the fructifications particular to this class, and this perhaps will bring us to determine the character of it with more precision. The most essential part of a compound flower is the receptacle, upon which are placed, first the florets and semiflorets, and then the seeds which succeed them. This receptacle which forms a disk of some extent, makes the centre of the calyx, as you may see in the dandelion, which we will here take as an instance. The calyx in this tribe is commonly divided into several parts down to the base, that it may close, open again and turn back, as it does during the progress of the fructification, without being torn. The calyx of the dandelion is formed of two rows of folioles inserted into each other, and the folioles of the outer row turn back and curl downwards towards the pedicle, whilst the folioles of the inner row continue straight, to surround and hold in the semiflorets composing the flower. One of the most common forms also of the calyx in this class is the imbricate, or that which is made up of several rows of folioles

lying upon each other, like tiles on a roof. The artichoke, blue bottle, knapweeds, and scorzoneras, may serve as instances of imbricated calyxes. The florets and semiflorets inclosed within the calyx are placed very thick upon the disk (or to the whole surface of the receptacle in which all the florets and semiflorets are fixed, for this also has got the name of disk) in the form of a quincunx or the checks upon a chess board. We will now go on to the structure of florets and semiflorets, beginning with the former. A floret is a monopetalous flower, commonly regular, with the corol divided at top into four or five parts. The five filaments of the stamens are fastened to the tube of this corol; they are united at top into a little round tube, which surrounds the pointal, and this tube is the five anthers united circularly into one body. This union of the anthers, according to modern Botanists, forms the essential character of compound flowers, and belongs to their florets only, exclusively of all others. If therefore you find several flowers upon the same disk, as in the scabionses and teasels; unless the anthers are united in a tube round the pointal, and the corol stands upon one naked seed, such flowers are not florets, nor do they form a compound flower; on the contrary whenever you find in a single flower, the anthers thus united, and a superior corol on a single seed, this flower, though sole, is a genuine floret, and belongs to the compound tribe; for it is better thus to take the character from a precise

structure, than from a deceitful appearance. The pointal has the style generally longer than the floret, above which it rises through the tube formed by the anthers. It is most frequently terminated at top by a forked stigma, the two curling horns of which are very visible. The pointal does not rest upon the receptacle any more than the floret, but both upon the germ, which serves them as a base, and grows and lengthens as the floret withers, becoming in time a longish seed, remaining fastened to the receptacle till it is ripe. Then it falls, if it be naked; or the wind wafts it to a distance, if it be crowned with an egret of feathers or hairs; and the receptacle remains quite naked in some genera, but it is furnished with scales or hairs in others. The structure of the semiflorets is like that of the florets; the stamens, the pointal, and the seed are arranged almost in the same manner; only in the radiate flowers there are many genera wherein the semiflorets of the ray are apt to be abortive, either because they have no stamens, or because those which they have are barren; in such cases the flower, seeds only by the florets in the middle; e. g. sunflower. In the whole class, the seed is always sessile, that is, it bears immediately upon the receptacle without any intermediate pedicle. But there are seeds in which the down or egret which crowns them is sessile, and others in which it is fastened to the seed by a pedicle. The use of this down is to spread the seeds about to a distance, by giving the air more hold upon

them. To these irregular imperfect descriptions, I should add, that the calyx has generally the property of opening when the flower expands, of closing when the florets fall off, in order to confine the young seed, and to prevent it from falling before it is ripe, and lastly of opening again and turning quite back to give a larger area to the seeds which increase in size as they grow ripe. You must have often seen the dandelion in this state, when children gather it, to blow off the down that forms a ball round the reverted calyx. To understand this class well, you must follow the flowers from before their expansion to the full maturity of their fruit, and in this succession you will see transformations and a chain of wonders, which will keep every sensible mind that observes them, in a continual admiration. One flower proper for these observations is the sunflower, which is radiate ; as are also oxeye, Chinese aster, and many others which are the ornament of the borders in autumn. There are thistles for the flosculous, and scorzonera and dandelion for the semiflosculous. All these are large enough to be dissected, and studied with the naked eye."

Of the Component Parts of a Plant.

" A perfect plant is composed of a root, of a stem with its branches, of leaves, flower, and fruit ; for in Botany, by fruit, in herbs as well as in trees, we understand the whole fabric of the seed. In the

flower nature has inclosed the summary of her work; by this she perpetuates it, and this also is commonly the most brilliant of all parts of the vegetable; and always least liable to variations."

Of the Characters of Plants.

"The vegetable kingdom is divided into classes; orders; genera; species, and varieties."

"Classes are the first division of plants; their characters are established on some part or parts of the fructification; as by Cæsalpinus on the fruit; by Ray on the corolla and the fruit; by Tournefort on the corolla; and by Linnæus on the stamens."

"Orders are the subdivisions of classes."

"A genus is an assemblage of species, nearly similar in all the parts of fructification."

"Species are the different forms of plants, which are supposed to have been originally created."

"Varieties are the incidental differences in plants, produced from seed of the same species, caused by the difference of climate, situation, or soil."

Of the System of Linnæus.

All known plants are divided by the Linnæan classification into 24 classes; the construction and distribution of the mode of arrangement are principally established upon, and regulated by the stamina or stamens, and the pistilla or pointals.

The following are the Titles and Characters of the Classes and Orders.

CLASS I. MONANDRIA	Flowers with 1 sta- men
ORDER 1. Monogynia	1 pointal
2. Digynia	2 pointals
CLASS II. DIANDRIA	Flowers with 2 sta- mens
ORDER 1. Monogynia	1 pointal
2. Digynia	2 pointals
3. Trigynia	3 pointals
CLASS III. TRIANDRIA	Flowers with 3 sta- mens
ORDER 1. Monogynia	1 pointal
2. Digynia	2 pointals
3. Trigynia	3 pointals

CLASS IV. TETRANDRIA	Flowers with 4 stamens, equal in length.*
ORDER 1. Monogynia	1 pointal
2. Digynia	2 pointals
3. Tetragynia	4 pointals
CLASS V. PENTANDRIA	Flowers with 5 stamens.
ORDER 1. Monogynia	1 pointal
2. Digynia	2 pointals
3. Trigynia	3 pointals
4. Tetragynia	4 pointals
5. Pentagynia	5 pointals
6. Polygynia	Many pointals
CLASS VI. HEXANDRIA	Flowers with 6 stamens, equal in length.†
ORDER 1. Monogynia	1 pointal
2. Digynia	2 pointals
3. Trigynia	3 pointals
4. Tetragynia	4 pointals
5. Polygynia	Many pointals
CLASS VII. HEPTANDRIA	Flowers with 7 stamens.
ORDER 1. Monogynia	1 pointal
2. Digynia	2 pointals

* See Class Didynamia. † See Class Tetradynamia.

ORDER 3. Trigynia	3 pointals
4. Heptagynia	7 pointals
CLASS VIII. OCTANDRIA	Flowers with 8 stamens.
ORDER 1. Monogynia	1 pointal
2. Digynia	2 pointals
3. Trigynia	3 pointals
4. Tetragynia	4 pointals
CLASS IX. ENNEANDRIA	Flowers with 9 stamens.
ORDER 1. Monogynia	1 pointal
2. Trigynia	3 pointals
3. Hexagynia	6 pointals
CLASS X. DECANDRIA	Flowers with 10 stamens.
ORDER 1. Monogynia	1 pointal
2. Digynia	2 pointals
3. Trigynia	3 pointals
4. Pentagynia	5 pointals
5. Decagynia	10 pointals

OBS.

*No plants have been yet found with eleven stamens, which is the reason no class has been allotted to that number.**

* See Order 6th of the Monadelphia Class, which appears

CLASS XI. DODECANDRIA Flowers from 12 to 19
 stamens, inclusive,
 fixed to the recep-
 tacle, or the base
 or seat on which the
 other parts of fruc-
 tification are fixed.

ORDER 1. Monogynia 1 pointal
 2. Digynia 2 pointals
 3. Trigynia 3 pointals
 4. Pentagynia 5 pointals
 5. Octagynia 8 pointals
 6. Dodecagynia 12 pointals

CLASS XII. ICOSANDRIA Flowers with sta-
 mens, 20 or more;
 inserted in the ca-
 lyx or corol.

ORDER 1. Monogynia 1 pointal
 2. Digynia 2 pointals
 3. Trigynia 3 pointals
 4. Pentagynia 5 pointals
 5. Polygynia Many pointals

in part to contradict this observation ; at least it clearly shews the propriety, if not necessity of introducing Endecandria as a distinct Class ; thus, "Class XI. Endecandria." "No plant is yet discovered with eleven stamens." Surely it is not beyond a possibility, that some time or other a plant may be found to fill up this Class ; at any rate, if it was inserted, there would be then no break in the numbering of the Classes. See Note 2.

CLASS XIII. POLYANDRIA Flowers with many stamens inserted in the receptacle, or the base or seat on which the other parts of fructification are placed.

ORDER 1. Monogynia	1 pointal
2. Digynia	2 pointals
3. Trigynia	3 pointals
4. Tetragynia	4 pointals
5. Pentagynia	5 pointals
6. Hexagynia	6 pointals
7. Polygynia	Many pointals

OBS.

The number of stamens is the distinction between this and the 11th class.

CLASS XIV. DIDYNAMIA Flowers with 4 stamens, 2 of which are longer than the other 2.*

ORDER 1. Gymnospermia Seeds naked, or without a pericarpium or seed-vessel.

ORDER 2. Angiospermia Seeds covered, or in a pericarpium or seed-vessel.

* See Class Tetrandria.

CLASS XV. TETRADYNAMIA Flowers with 6 stamens, 4 longer than the other 2.*

ORDER 1. Siliculosa a short pod
 2. Siliquosa a long pod

CLASS XVI. MONADELPHIA Flowers with stamens united in 1 set.

ORDER 1. Triandria 3 stamens in 1 set
 2. Pentandria 5 stamens in 1 set
 3. Octandria 8 stamens in 1 set
 4. Enneandria 9 stamens in 1 set
 5. Decandria 10 stamens in 1 set
 6. Endecandria 11 stamens in 1 set†
 7. Dodecandria 12 stamens in 1 set
 8. Polyandria Many stamens in 1 set

CLASS XVII. DIADELPHIA Flowers with stamens united in 2 sets.

ORDER 1. Pentandria 5 stamens in 2 sets
 2. Hexandria 6 stamens in 2 sets
 3. Octandria 8 stamens in 2 sets
 4. Decandria 10 stamens in 2 sets

CLASS XVIII. POLYADELPHIA Flowers with stamens united in many sets.

ORDER 1. Pentandria 5 stamens in many sets.

* See Class Hexandria, † See obs. before Class XI.

ORDER 2. Dodecandria	12 stamens in many sets.
3. Icosandria	20 stamens in many sets.
4. Polyandria	Many stamens in many sets.

CLASS XIX. SYNGENESIA Anthers united in a cylinder.

ORDER 1. Polygamia æqualis Flower compound; all the florets with stamens and pointals.

ORDER 2. Polygamia superflua Flower compound; the florets of the disk or centre with stamens and pointal; those of the ray or circumference only with a pointal.

ORDER 3. Polygamia frustanea Flower compound; the florets of the disk or centre with stamens and pointal; those of the ray are imperfect and do not bear seed.

ORDER 4. Polygamia neces- Flower compound;
saria the florets of the
disk with stamens,
and an imperfect
pointal and stigma;
those of the ray
with pointals.

ORDER 5. *Polygamia segre-* The title of this or-
gata der signifies to be
separated. Flower
compound, having
partial cups grow-
ing out of the com-
mon calyx, which
surround and di-
vide the florets.

ORDER 6. Monogamia Flowers simple

CLASS XX. GYNANDRIA

Stamens growing either on the pointal, or on a receptacle that stretches out into the form of a style, and supports both the stamens and the pointal.

ORDER 1. Diandria Flowers with 2 sta-
mens.

2. Triandria Flowers with 3 sta.
 mens.

ORDER 3. Tetrandria Flowers with 4 stamens

- | | |
|----------------|-------------------|
| 4. Pentandria | with 5 stamens |
| 5. Hexandria | with 6 stamens |
| 6. Octandria | with 8 stamens |
| 7. Decandria | with 10 stamens |
| 8. Dodecandria | with 12 stamens |
| 9. Polyandria | with many stamens |

CLASS XXI. MONŒCIA Flowers with stamens
and pointals, in separate blossoms, on
the same plant.

ORDER 1. Monandria Flowers with 1 stamen.

2. Diandria	with 2 stamens
3. Triandria	with 3 stamens
4. Tetrandria	with 4 stamens
5. Pentandria	with 5 stamens
6. Hexandria	with 6 stamens
7. Heptandria	with 7 stamens
8. Polyandria	with many stamens
9. Monadelphia	with stamens united
10. Syngenesia	with anthers united
11. Gynandria	with stamens growing out of a kind of style or imperfect pointal.

CLASS XXII. DIOECIA

Flowers with stamens
and pointals on dif-
ferent plants of the
same species

ORDER 1. Monandria

Flowers with 1 stamen

2. Diandria

with 2 stamens

3. Triandria

with 3 stamens

4. Tetrandria

with 4 stamens

5. Pentandria

with 5 stamens

6. Hexandria

with 6 stamens

7. Octandria

with 8 stamens

8. Enneandria

with 9 stamens

9. Decandria

with 10 stamens

10. Dodecandria

with 12 stamens

11. Polyandria

with many stamens

12. Monadelphica

with stamens united

13. Syngenesia

with anthers united

14. Gynandria

with stamens growing
on a kind of style
or imperfect pointal

CLASS XXIII. POLYGAMIA

Flowers with stamens
and pointals, and
also with stamens
or pointals.

ORDER 1. Monœcia

Flowers with stamens
and pointals, and
also with stamens
or pointals on the
same plant.

- | | |
|-----------------|---|
| ORDER 2. Diœcia | Flowers as before, but
on 2 distinct plants. |
| 3. Triœcia | Flowers as before, but
on 3 distinct plants. |

CLASS XXIV. CRYPTOGA-
MIA

Flowers either concealed within the plant, or so small as not to be perceptible to the naked eye.

- | | |
|------------------|-----------------|
| ORDER 1. Filices | Ferns |
| 2. Musci | Mosses |
| 3. Algæ | Flags or thongs |
| 4. Fungi | Mushrooms |
-

A
BOTANICAL DESCRIPTION
OF THE
PLANTS,
GROWING WILD IN THE MIDLAND COUNTIES;
AND
PARTICULARLY OF THOSE
IN THE
NEIGHBOURHOOD OF ALCESTER;

Situate nearly in 52 Degrees 20 Minutes, North Latitude, and
1 Degree 50 Minutes, West Longitude;

ON THE VERY BORDER OF THE COUNTY, ON THE WORCESTER-
SHIRE SIDE.

The Plants will be arranged according to the System of Linnæus,
and to the most improved natural Classification.

Monandria. Monogynia. A'phanes.

CLASS I.

MONANDRIA. One stamen.

ORDER I.

MONOGYNIA. One pointal.

Genus 1.

A'PHANES. Parsleypiart.

NAT. ORD. Senticosæ.

GEN. CH. Calyx tubular; rim flat, 4 or 8-cleft;
blossom none; seed one, egg-shaped, but taper-
ing to a point.

Species.

1. A'PHANES ARVEN'SIS V. S. 1
Parsleypiart.

SP. CH. Leaves 3-lobed; lobes with 2 or 3 clefts.
Withering's Bot. Arr. vol. 2. p. 4. 4th edition.

SYN. Alchemilla A'phanes. *English Botany, tab.*
1011. *Abbot. Fl. Bedford. 124.*

Cornfields and dry gravelly lands. May, August.
Common. P.

ORDER II.

DIGYNIA. Two pointals.

Genus 1.

CALLI'TRICHE. Starwort.

NAT. ORD. Holeraceæ.

GEN. CH. Cup none; petals two; capsule 2-celled,
four seeds.

Species.

2. CALLI'TRICHE VER'NA V. S. 1.
Vernal Starwort.

SP. CH. Upper leaves oval; stamen and pointals
in separate flowers. *With. Bot. Arr. p. 5. E.*
B. 722.

Ditches. April. Common. A.

3. CALLI'TRICHE AUTUMNA'LIS . . . V. S. 2.
Autumnal Starwort.

SP. CH. All the leaves strap-shaped, cloven at the
end; stamen and pointals in the same flower.
With. Bot. Arr. p. 6. E. B. 722.

Ditches. September. Common. A.

CLASS II.

DIANDRIA. Two stamens.

ORDER I.

MONOGYNIA. One pointal.

Genus 1.

LIGUS'TRUM. Privet.

NAT. ORD. Sepiariæ.

GEN. CH. Blossom 4-cleft; berry 4 seeds.

Species.

4. LIGUS'TRUM VULGA'RE V.S. 1.
Common Privet.

SP. CH. Leaves egg-shaped; blunt; panicle with
3 divisions. *With.* 8. *E. B.* 764.

Woods, hedges. Common. June. S.

Genus 2.

VERONI'CA. Speedwell.

NAT. ORD. Personatæ.

GEN. CH. Blossom with a border of 4 divisions,
lower segment narrowest, capsule of 2 divisions.

Species.

5. VERONI'CA CHAMÆ'DRYS V.S. 1.
Germander Speedwell.

SP. CH. Bunches lateral; leaves ovate, sitting, wrinkled, toothed, stem hairy on two sides.

With. Bot. Arr. p. 15. Sowerby's E. B. 623.

Pastures, sides of hedges. Common. May. P.

OBS.

The most beautiful of the British species.

6. VERONI'CA OFFICINA'LIS V. S. 2.

Common Speedwell.

SP. CH. Spikes on lateral fruit-stalks; leaves opposite; stem trailing. *With. 12. E. B. 765.*

Sandy banks. Heaths. Rare. June. P.

Astwood Bank, Worcesters. Dunnington, Cough-ton, Warwickshire.

7. VERONI'CA BECCABUN'GA V. S. 3.

Brooklime Speedwell.

SP. CH. Bunches lateral; leaves flat, ovate, stem creeping. *With. 14. E. B. 655.*

Ditches and rivulets. Common. June. P.

8. VERONI'CA ANAGAL'LIS V. S. 4.

Water Speedwell.

SP. CH. Bunches lateral; leaves spear-shaped, serrated; stem upright. *With. 14. E. B. 781.*

Ditches. Common. July. P.

OBS.

A tall and rather shewy plant.

9. VERONICA AGRESTIS V.S. 5.
Garden Speedwell.

SP. CH. Flowers single; leaves heart-shaped, jagged, on leaf-stalks, shorter than the fruit-stalks.
With. 16. *E. B.* 783.

Gardens and fields. Common. May, and as early as March. A.

10. VERONICA HEDERÆFOLIA V.S. 6.
Ivy-leaved Speedwell.

SP. CH. Flowers single; leaves heart-shaped, flat, 5-lobed. *With.* 16. *E. B.* 784.

Gardens, fallow-fields. Common. April. A.

11. VERONICA SERPYLLIFOLIA V.S. 7.
Smooth Speedwell. Paul's Betony.

SP. CH. Bunch of flowers terminal, resembling a spike; leaves ovate, smooth, scalloped. *With.* 13. *E. B.* 1075.

Moist meadows and pastures, not uncommon.
May. P.

12. VERONICA SCUTELLATA V.S. 8.
Narrow-leaved Speedwell.

SP. CH. Bunches lateral, thinly set with flowers,

wide spreading, alternate; little fruit stalks pendent; leaves very entire, strap-shaped. *With.* 15. *E. B.* 782.

Turfy bogs and marshy places. July: Rare. P.
Shelfield. Coleshill Bog.

13. VERONI'CA MONTA'NA V.S. 9.
Mountain Speedwell.

SP. CH. Bunches lateral, with few flowers; cups hairy; leaves ovate, wrinkled; scalloped on leaf-stalks; stem limber. *With.* 15. *E. B.* 766.

Woods and hedges. May. Very rare. P.
In a moist woody place, near Hord's Park, Salop.

14. VERONI'CA TRIPHYL'LOS V.S. 10:
Trifid Speedwell.

SP. CH. Flowers single; leaves with finger-like divisions; fruit-stalks longer than the calyx.
With. 16. *Sowerby's E. B. tab.* 26.

Sandy fields. April, May. Not rare. A.

Genus 3.

CIRCÆA. Enchanter's Nightshade.

NAT. ORD. Aggregatæ.

GEN. CH. Blossom 2 petals; cup 2 leaves, superior; seed-vessel, 1 or 2 divisions.

Species.

15. CIRCÆA LUTETIA'NA V. S. 1.

Enchanter's Nightshade, Enchanter's-wort.

SP. CH. Stem upright; bunches of flowers many; leaves egg-spear-shaped, hairy. *With.* 9. *E.* *B.* 1056.

Woods, moist hedge bottoms. Common. June, August. P.

16. CIRCÆA ALPI'NA 2.

Mountain Enchanter's wort.

SP. CH. Stem prostrate, supporting a single bunch of flowers; leaves heart-shaped; stem very much branched, depressed; leaves toothed, pale, pointed. *With.* 9. *E. B.* 1057.

Rocky woods. Very rare. July. P.

Balsal Temple. Springfield. *Rev. W. Bree, jun. Allesley.*

Woods in the neighbourhood of Abergavenny, Monmouthshire. Common.

Genus 4.

UTRICULA'RIA. Bladderwort.

NAT. ORD. Corydales.

GEN. CH. Blossom gaping, ending in a spur; cup of 2 leaves, equal; capsule 1 cell.

Species.

17. UTRICULA'RIA VULGA'RIS 1.

Common Bladderwort. Greater Bladdersnout.

SP. CH. Nectary conical, stalk with few flowers;
With. 18. *E. B.* 253.

Ditches and stagnant waters. July. Rare. P.

Between Bainton and Burford, Oxfordshire. *Rev.*
W. S. Rufford, Badsey.

Genus 5.

PINGUI'CULA. Butterwort.

NAT. ORD. Corydales.

GEN. CH. Blossom gaping, with a spur; cup 2-lip-
ped, 5-cleft; capsule 1-cell.

Species.

18. PINGUI'CULA VULGA'RIS V.S. 12

Common Butterwort. Yorkshire Sanicle.

SP. CH. Nectary cylindrical, the length of the pe-
tal. *With.* 17. *E. B.* 70.

Bogs. May. Rare. P.

Upper-side of Feckenham Bog, Worcestershire.
Coleshill Bog. Western side of Malvern Hill.
Bannersley Pool. *Bree.* Bog at Underton, near
Bridgnorth. *Dr. J. G. Hall, Croft.*

Genus 6.

VERBE'NA. Vervain.

NAT. ORD. Personatæ.

GEN. CH. Blossom funnel-shaped, nearly equal, crooked; one tooth of the cup lopped; seeds 2 or 4, naked; stamens 2 or 4.

Species.

19. VERBE'NA OFFICINA'LIS . . . V.S. 1.
Common vervain. Simpler's Joy.

SP. CH. Spikes thread-shaped, paniced; leaves jagged, with many divisions; stem solitary.
With. 509. *E. B.* 767. *Woodville*, 218.

Road sides, near to towns. July. Common. P.

OBS.

I have kept to Linnæus's classification; as the specimen I met with, had but two stamens. (See Withering, and Woodville's Medical Botany.)

Genus 7.

LY'COPUS: Water-horehound.

NAT. ORD. Verticillatæ.

GEN. CH. Blossom of 4 divisions, one segment notched at the end; stamens distant; seeds 4, rounded.

Species.

20. LY'COPUS EUROPE'US . . . V.S. 1.
Common Water-horehound, Gypsie-wort.

SP. CH. Leaves indented and serrated. *With.* 19.
E. B. 1105.

Banks of rivers and ditches. August. Common. P.

OBS.

It dyes black. Travelling gypsies stain their faces with it. Withering.

Genus 8.

SAL'VIA. Sage.

NAT. ORD. Verticillatæ.

GEN. CH. Blossom unequal; threads fixed transversely to a little foot-stalk.

Species.

21. SAL'VIA VERBENA'CA V. S. 1.
 Vervain Sage. Wild Clary.

SP. CH. Leaves indented, serrated, smoothish; blossom more slender than the calyx or cup. *With.* 20.
E. B. 154.

Path-ways and road-sides, not common. June. P.

Bidford and Haslor, near the Churches, Warwickshire. By the side of the road at Harvington, leading to the Mill, Worcestershire.

ORDER II.

DIGYNIA. Two pointals.

This Order contains but one Genus.

ANTHOXAN'THUM. Vernal Grass.

NAT. ORD. Gramina.

GEN. CH. Cup, chaff of 2 valves, containing 1 flower; blossom, a chaff of 2 valves, pointed; seed one.

Species.

22. ANTHOXAN'THUM ODORA'TUM . . V.S. 1.
Sweet Vernal-grass.

SP. CH. Spike ovate-oblong, florets on short fruit-stalks, longer than the beard. *With.* 58. *E. B.* 647.

Meadows and pastures. May. Common. P.

OBS.

It has obtained the trivial name of odoratum, from the sweet odour which it communicates to hay.

CLASS III.

TRIANDRIA. Three stamens.

ORDER I.

MONOGYNIA. One pointal.

* Flowers with petals.

Genus 1.

VALERIA'NA. Valerian.

NAT. ORD. Aggregatæ.

GEN. CH. Cup none; blossom gibbous or hunch-
ed at the base on one side, superior; seed one.

Species.

23. VALERIA'NA DIOI'CA V.S. 1.

Marsh Valerian:

SP. CH. Flowers diæcious, with 3 stamens; leaves
winged, very entire. *With.* 64. *E. B.* 628.

Moist meadows and marshes. May. Not very
rare. P.

Marshy ground, by Hoo-mill. Near Middle-town.

24. VALERIA'NA OFFICINA'LIS . . . V.S. 2.

Common Valerian.

SP. CH. Flowers with 3 stamens; all the leaves
winged. *With.* 64. *E. B.* 698. *Woodville*, 96.

Woods. June. Not rare. P.

Oversley Wood.

Obs.

*This is the valerian of the shops, and is much
used in medicine. It is certainly a most excellent
antispasmodic. Cats are delighted with the roots,
and rats are said to be equally fond of them.*

25. VALERIA'NA LOCUS'TA V. S. 3.

Corn salad Valerian. Lamb's-lettuce.

SP. CH. Flowers with 3 stamens; stem forked;
leaves strap-shaped. *With.* 65. *E. B.* 811.

Corn-fields, and on hedge-banks. Common. A.

OBS.

The young plants in spring are eaten as salad, and as they come early, they are a valuable acquisition; for they are not inferior to young lettuce.

Genus 2:

IRIS. Flag.

NAT. ORD. Eusatæ.

GEN. CH. Blossoms with 6 divisions; petals alternate, bent back; the stigmas resembling petals.

Species.

26. IRIS PSEUDA'CORUS V. S. 1.

Yellow Iris. Yellow Water-flag.

SP. CH. Blossoms not fringed; inner petals smaller than the stigma; leaves sword-shaped. *With.* 69.
E. B. 578: *Woodville*, 40.

Banks of rivers and wet ditches. June. Common. P.

27. IRIS FÆTIDISS'IMA 2.

Stinking Gladwin. Stinking Flag.

SP. CH. Blossoms not fringed; inner petals expanding very much; stem with one angle; leaves sword-shaped. *With.* 70. *E. B.* 596.

Hedges. July. Rare. P.

Alne Hills. *Rev. W. S. Rufford.*

** Flowers without petals.

Genus 3.

SCHÆ'NUS. Bog-rush.

NAT. ORD. Calamariæ.

GEN. CH. Husks chaffy, of 1 valve, crowded; blossom none; seed 1, roundish, within the husks.

Species.

28. SCHÆ'NUS MARIS'CUS V. S. 1.

Long-rooted Bog-rush.

SP. CH. Straw round, smooth, leaves prickly at the edge and along the back. *With.* 79. *E. B.* 950. *Parkinson*, 1264. 1.

Marshes, bogs. July, August. Rare. P.

OBS?

A plant 4 or 5 feet high, unbranched, with leaves 2 feet long or more, and nearly 1 inch in breadth, ending in a sharp point; prickles on the

mid-rib and edge, short and stiff, The whole plant remarkably rigid.

Feckenham Bog, Worcestershire.

29. SCHÆNUS AL'BUS V. S. 2.
White-flowered Bog-rush.

SP. CH. Straw leafy, nearly 3-cornered; flowers bundled; leaves like bristles. *With.* 81. *E. B.* 985.

Bogs. July, August. Rare. P.

Coleshill Bog.

OBS.

This is a diminutive plant compared with the former.

Genus 4.

CYPE'RUS. Rush-grass.

NAT. ORD. Calamariæ.

GEN. CH. Husks chaff-like, tiled in 2 rows ; blossoms none; seed 1, naked.

Species.

30. CYPE'RUS NI'GRICANS V. S. 1.
Black Bog-rush-grass.

SP. CH. Straw naked; spikes egg-shaped, compressed; involucrum 2-leaved; 1 valve long, awl-sha-

ped. *With.* vol. 2. p. 77. 4th edition. *Syn.*
Schænus nigricans. *E. B.* 1121.

Bogs. June, July. Common. P.

Feckenham Moors, Worcestershire. Coleshill Bog,
 Warwickshire.

Genus 5.

SCIR'PUS. Club-rush.

NAT. ORD. Calamariæ.

GEN. CH. Husks chaffy, tiled on every side; blossom none; seed 1, beardless.

Species.

31. SCIR'PUS PALUS'TRIS. V.S. 1.
 Marsh Club-rush.

SP. CH. Straw round, naked; spike terminal and nearly ovate. *With.* 72. *E. B.* 131.

Banks of rivers and wet meadows. Common.
 June. P.

32. SCIR'PUS LACUS'TRIS V. S. 2.
 Tall Club-rush. Bull-rush.

SP. CH. Straw round, naked; spikes ovate, many in number, on fruitstalks terminating. *With.* 74. *E. B.* 666.

Rivers, ditches, and standing waters. July. Common. P.

33. SCIR'PUS CÆSPITO'SUS V. S. 3.

Dwarf Club-rush. Deer's hair.

SP. CH. Straw scored, naked; spike 2-valved, terminating, long as the involucre; roots separated by scales. *With.* 73. *E. B.* 1029.

Turf bogs and dry heaths. July. Rare. P.

Bromsgrove Lickey, Worcestershire. Coleshill Bog, Warwickshire.

34. SCIR'PUS SETA'CEUS V. S. 4.

Least Club-rush, Small Plymouth-rush grass.

SP. CH. Straw naked, bristle like; spikes lateral, mostly single, sitting or on fruit-stalks; terminating spike sitting. *With.* 76. *E. B.* 1693.

Wet sandy ground. July, August. Rare. A.

In a dry pool at Cookhill, Worcestershire.

35. SCIR'PUS SYLVATICUS : V. S. 5.

Wood Club-rush.

SP. CH. Straw 3-cornered, leafy; umbel leafy; fruit-stalks naked, trebly compound; spikes crowded; scales entire. *With.* 76. *E. B.* 919.

Wet shady places. July. Rare. P.

Oversley Mill-pond. King's Coughton.

36. SCIR'PUS MARIT'IMUS V. S. 6.

Salt-marsh Club-rush.

SP. CH. Straw 3-cornered; panicle close, and leafy; scales of the spikets 3-cleft, the middle segment awl-shaped. *With.* 77. *E. B.* 542. *Parkinson*, 1266. 6.

Salt marshes. Rare. August. P.

Marshes and ditches about Badsey. *Rufford*.

OBS.

The roots dried and ground to powder, have been used instead of flour in times of scarcity. There can be no doubt, but the presence of so many plants, that are only to be found in salt marshes, or in the neighbourhood of the sea; shew that there must be salt springs, at, or near to Badsey.

Genus 6.

ERIOPHORUM. Cotton-grass.

NAT. ORD. Calamariæ.

GEN. CH. Husks chaffy, tiled all round; blossom none; seed 1, surrounded with very long wool-like hairs.

Species.

37. ERIOPHORUM POLYSTACHION . . V.S. 1.
Many-headed cotton-grass.

SP. CH. Straws round; leaves flat; spikes on fruit-stalks. *With.* 71. *E. B.* 563.

Bogs. April. Not very rare. P.

Boggy field near Trent's-lane turnpike.

38. ERIOPHORUM VAGINATUM . . . V. S. 2.
Single-headed cotton-grass. Hare's-tail.

SP. CH. Straw cylindrical, sheathed; spike skinny.
With. 71. *E. B.* 873.

Bogs. February, April. Rare. P.

Bannersley Pool. Coleshill Bog. *Bree.*

*** Flowers grass-like.

Genus 7.

NAR'DUS. Mat-grass.

NAT. ORD. Gramina.

GEN. CH. Cup none; blossom of 2 valves.

Species.

39. NAR'DUS STRICTA V. S. 1.
Mat-weed or Mat-grass.

SP. CH. Spike slender, straight; the florets pointing in one direction. *With.* 710. *E. B.* 290.

Heaths. June. Not very rare. P.

Grows in great plenty on Studley Common. The matted order of the stems gives it the trivial name with much propriety.

ORDER II.

DIGYNIA. Two pointals.

Genus 1.

PHLE'UM. Cat's-tail.

NAT. ORD. Gramina.

GEN. CH. Calyx 2-valves, sitting, linear, truneate, with 2 spit-points at the end; blossom inclosed.

Species.

40. PHLE'UM PRATEN'SE V. S. 1.
Meadow Cat's-tail. Timothy Grass.

SP. CH. Spike cylindrical, very long, fringed; straw upright. *With.* 117. *E. B.* 1076.

Meadows and pastures. July. Common. P.

Genus 2.

ALOPECU'RUS. Fox-tail.

NAT. ORD. Gramina.

GEN. CH. Calyx 2 valves; blossom 1 valve.

Species.

41. ALOPECU'RUS PRATEN'SIS V. S. 1.
Meadow Fox-tail.

SP. CH. Straw erect, spiked; chaff woolly; blossoms awned. *With.* 119. *E. B.* 759.

Meadows and pastures. June. Common. P.

OBS.

The awn is fixed to the back of the valve, and

is nearly twice the length of the calyx, and is knee-bent.

42. ALOPECU'RUS GENICULA'TUS . . . V.S. 2.
Jointed Fox-tail.

SP. CH. Spiked straw, knee jointed. *With.* 120.
E. B. 1250.

Moist Meadows, sides of ponds. June. Common. P.

43. ALOPECU'RUS AGRES'TIS . . . V.S. 3.
Field Fox-tail.

SP. CH. Spiked straw erect, husks smooth, united at the base. *With.* 119. *E. B.* 848.

Cornfields. June. Too common. A.

OBS.

At least one third of the seed of the A. pratensis are yearly destroyed, by a very minute orange coloured larva or maggot.

Genus 3.

DAC'TYLIS. Cock's-foot.

NAT. ORD. Gramina.

GEN. CH. Cup 2 valves, compressed, 1 valve larger and keeled.

Species.

44. DAC'TYLIS GLOMERA'TA . . . V.S. 1.

Rough Cock's-foot Grass.

SP. CH. Panicle crowded, flowering on one side.

With. 149. *E. B.* 335.

Pastures and orchards. Very common. July. P.

Genus 4.

PHAL'ARIS. Canary-grass.

NAT. ORD. Gramina.

GEN. CH. Cup of 2 valves, with one flower, the small valves nearly equal; blossom very short, stigmas feather-shaped.

Species.

45. PHAL'ARIS ARUNDINA'CEA . . . V.S. 1.

Reed Canary-grass.

SP. CH. Panicle large, oblong, loose, clustered; keel rough; leaves broad, flat. *E. B.* 402. *Syn.*

Calamagrostis variegata. *With.* 124.

Banks of rivers and ponds. Not uncommon. July. P.

OBS.

Blossom white, or a beautiful reddish bloom. There is a variety cultivated in gardens with striped leaves.

Genus 5.

AGRO'STIS. Bent-grass.

NAT. ORD. Gramina.

GEN. CH. Cup, 2 equal pointed valves, containing 1 floret; blossom, 2 unequal valves, smaller than the cup; stigmas longitudinally rough with hairs.

Species.

46. AGRO'STIS CAPILLA'RIS V. S. 1.
Fine Bent-grass.

SP. CH. Panicle very slender, expanding; cups awl-shaped, equal, slightly rough with hair, coloured; florets awnless. *With.* 132. *E. B.* 1671. *Syn. A. vulgaris.*

Pastures and woods. June. Common. P.

47. AGRO'STIS AL'BA V. S. 2.
White Bent. White Squitch.

SP. CH. Panicle large, spreading; calyx valves serrulated; straw creeping. *With.* 129. *E. B.* 1189.

Bogs and wet meadows. June. Common. P.

48. AGRO'STIS STOLONIF'ERA V. S. 3.
Creeping bent. Black Squitch.

SP. CH. Panicle compact, branches stiff, short, densely crowded with florets at the base; calyx,

inner valve smooth, outer only serrulated upwards. *With.* 131. *E. B.* 1532.

Moist meadows, and cold stiff arable lands. July, September. P.

OBS.

I cannot perceive myself, any essential specific difference, between this and the famous Fiorin Grass. Although the former is considered by all farmers as a very vile weed; I do think Dr. Richardson's recommendation of the latter, has not been attended to in this country, with that proper degree of spirit and candour that it deserved.

49. AGRO'STIS PUMI'LA (*Flor. Cantab.*) V.S. 4.
Dwarf Bent-grass.

SP. CH. Panicle awnless, pointing in one direction; straws upright, crowded. *Syn. A. vulgaris* Var. 2. *With.*

Dry places, in poor barren soil. July. P.

Astwood Common, Worcestershire.

OBS.

From 2 to 4 inches high; seeds large for the size of the plant. The size of the seed is remarkable; they are large and fleshy.

Genus 6.

MI'LIIUM. Millet.

NAT. ORD. Gramina.

GEN. CH. Cup of 2 valves, with one flower; valves nearly equal; blossom very short; stigmas pencil-shaped.

Species.

50. MI'LIIUM EFFU'SUM V. S. 1.
Wood Millet-grass.

SP. CH. Flowers in panicles, scattered, awnless.
With. 122. *E. B.* 1106.

Wet woods. Common. May. P.

Ragley and Oversley Woods.

OES.

There is something very light and elegant in this lofty plant; and it may be proper to mention, that in every specimen which I examined, the middle branches of the panicle droop and point directly downward.

Genus 7.

A'IRA. Hair-grass.

NAT. ORD. Gramina.

GEN. CH. Cup 2 valves, containing 2 florets, without the rudiment of a third between them.

Species.

51. A'IRA FLEXUO'SA V. S. 1.
Heath Hair-grass.

SP. CH. Leaves bristle-shaped; straws nearly naked; panicle diverging; fruit-stalk zigzag. *With.* 136. *E. B.* 1519.

Heaths, woods, and barren pastures. July. Common. P.

52 A'IRA CARYOPHYLLÉ'A V. S. 2.
Silver Hair-grass.

SP. CH. Leaves like bristles; sheaths smoothish, furrowed; panicle wide spreading when ripe, close whilst in flower; awns taller than the calyx. *With.* 137. *E. B.* 812.

Heaths and sandy pastures. July. Rare. A.

OBS.

In Oversley Wood on a sandy bank. The panicle being spike-like when in flower, and spreading when ripe, is a ready distinction. It is a very low plant, scarcely ever exceeds 10 inches.

53. A'IRA CAESPITO'SA V. S. 3.
Turfy Hair-grass.

SP. CH. Leaves flat; panicle expanding; petals woolly and awned at the base; awn straight, short. *With.* 135. *E. B.* 1453.

Moist woods and pastures. June. Common. P.

OBS.

This very lofty and beautiful grass, droops very gracefully before it flowers, inclining to one side; as the florets open, it becomes erect, and the branches of the panicle spread equally on every side. The leaf is very long, very rough, and neatly striated or scored. Called by the common people, hassocks, rough caps, &c.

54. A'IRA AQUAT'ICA V.S. 4.

Water Hair-grass.

SP. CH. Panicle expanding; florets without awns, smooth, longer than the calyx or cup; leaves flat. *E. B.* 1557. *With.* 135. *Abbot*, 47.

Margins of pools and ditches, road sides. Rare. June. P.

About Stourbridge, Worcestershire. Bidford, Warwickshire. *Rufford*.

Genus. 8.

ME'LICA. Melic-grass.

NAT. ORD. Gramina.

GEN. CH. Calyx 2 valves containing 1 or 2 florets, with an imperfect floret between them.

OBS.

The rudiment of a third floret standing upon a little pedicle betwixt the two florets, gives the essential character of this genus. When there is

only 1 floret in each cup or empalement, this rudiment is found betwixt the blossom and the inner valve of the empalement. *Withering.*

Species.

55. ME'LICA UNIFLO'RA V. S. 1.

Wood Melic. Single-flowered Melic-grass.

SP. CH. Panicle with few flowers; cup with 2 florets, 1 with stamens and pointals, the other without either; panicle nodding. *With.* 139. *E. B.* 1058.

Woods and hedges. Not rare. May. P.

Oversley lane, &c.

56. ME'LICA CÆRU'LEA V. S. 2.

Purple or blue Melic-grass.

SP. CH. Panicle compact; flowers cylindrical. *With.* 138. *E. B.* 750.

Boggy barren meadows and moist heaths. Rare. P.

Coleshill Bog.

OBS.

This is a tall grass; root bulbous; the straw only with one knot close to the root; this I found was the case in every plant.

Genus 9.

BRO'MUS. Brome-grass.

NAT. ORD. Gramina.

GEN. CH. Calyx 2 valves, spikelet oblong, cylindrical, in 2 rows; awn beneath the point.

Species.

57. BRO'MUS AS'PER V. S. 1.
Hairy-stalked Brome-grass.

SP. CH. Panicle nodding, rough, branched, branches in pairs; spikelets strap-shaped, woolly, awned, awns straight; leaf-sheaths hairy; spikets 10-flowered. *With.* 161. *E. B.* 1172. *Syn. B. hirsutus.* *Abbot.*

Woods and hedges. Frequent. July. P.

OBS.

The hairy sheath will at once distinguish this plant.

58. BRO'MUS STER'ILIS. V. S. 2.
Barren Brome-grass.

SP. CH. Panicle spreading; spikelets oblong, in 2 rows; awns very long. *With.* 161. *E. B.* 1030.

Woods and hedge sides. Frequent. June. A.

OBS.

Little spikes flat, upon very long foot-stalks; panicle nodding, branched; branches in threes, fours, and sometimes in sixes, but mostly in fours.

59. BRO'MUS MOL'LIS V. S. 3.

Soft Brome-grass.

SP. CH. Panicle rather straight; spikelets ovate, downy, few, awns straight; leaves woolly, very soft. *With.* 159. *E. B.* 1078. *Syn. B. polymorphus*, *Var.* 1. *With.*

Meadows, pastures, and even on walls. May. Common. A.

60. BRO'MUS GIGANTE'US V. S. 4.

Tall Brome-grass.

SP. CH. Panicle nodding; spikelets 4-flowered, shorter than the awns. *With.* 162. *Syn. Festuca gigantea*. *E. B.* 1820.

Woods and hedges. July. Not rare. P.

OBS.

In Wixford lane and Worcester lane, &c: This plant has so much the natural air of a Bromus, that I have with due respect, still placed it among that family. By a casual observer, the giganteus may easily be taken for the asper, but there is difference enough on a closer examination; the asper is rough and hairy, but in the giganteus, the leaves and stem are of a bright glossy green and remarkably smooth; added to these, the sheath scale is a bright purple and cloven, embracing the stem; this circumstance alone, as Mr. Curtis has observed, is sufficient to distinguish it.

Genus 10.

ARUN'DO. Reed.

NAT. ORD. Gramina.

GEN. CH. Calyx 2 valves; blossom awnless, surrounded with down at the base.

Species.

61. ARUN'DO PHRAGMI'TES . . . V. S. 1.
Common Reed.

SP. CH. Panicle loose, nodding, having 5 flowers growing together in one calyx. *E. B.* 401. *With.* 166.

Wet ditches and banks of rivers. Common. P.

OBS.

The Swedes use the panicles to dye woollen green; we use them for thatching.

62. ARUN'DO EPIGE'JOS : . . : V. S. 2.
Wood Reed-grass.

SP. CH. Panicle stiff and straight; blossoms small, hairy at the base; leaves flat. *E. B.* 402. *Syn. Calamagrostis. With.* 123.

Moist woods and hedges. Not rare. July. P.

OBS.

A lofty grass, 4 or 5 feet high; leaves very stiff and harsh.

Genus 11.

PO'A. Meadow-grass.

NAT. ORD. Gramina.

GEN. CH. Cup 2 valves, containing many florets; spikelets ovate; valves somewhat pointed; skinny at the edges.

Species.

63. PO'A AN'NUA V. S. 1.
Annual Meadow-grass. Suffolk-grass.

SP. CH. Panicles spreading horizontally; branches in pairs; spikelets blunt; straw obliquely compressed. *With.* 143. *E. B.* 1141.

Meadows and road sides. April. Common. A.

OBS.

This grass is in flower nearly the whole year.

64. PO'A AQUAT'ICA V. S. 2.
Water Meadow-grass.

SP. CH. Panicle spreading; spikets strap-shaped, containing 6 flowers. *With.* 140. *E. B.* 1315.

Marshes and banks of rivers. Common. August. P.

OBS.

A very lofty plant, the panicle alone is full a foot in length.

65. PO'A RIG'IDA V. S. 3.
Hard Meadow-grass.

SP. CH. Panicle spear-shaped, somewhat branched,
branches alternate, pointing one way; fruit-stalk
bordered. *With.* 146. *E. B.* 1371.

Dry and sandy places, walls and roofs. May.
Not rare. **A.**

Wall at Oversley Green Bridge, &c.

66. PO'A COMPRES'SA. V. S. 4.
Creeping Meadow-grass. Flat-stalked Meadow-
grass.

SP. CH. Panicle compact; straw slanting, compress-
ed. *With.* 147. *Abbot*, 60. *E. B.* 365.

Walls and house-tops. Common. June. P.

67. PO'A PRATEN'SIS V. S. 5.
Smooth stalked Meadow-grass.

SP. CH. Panicle spreading; spikets with 5 flowers,
smooth; straw cylindrical, erect; sheath scale
short and blunt. *With.* 141. *E. B.* 1073.

Walls and meadows. Common. May, June. P.

68. PO'A TRIVIA'LIS V. S. 6.
Rough stalked Meadow-grass.

SP. CH. Panicle spreading; spikets with 3 flowers,
woolly at the base; straw erect, rough; sheath
scale tapering to a point. *With.* 143. *E. B.*
1072.

Moist meadows and sides of ditches. Common.
June, July. P.

69. PO'A DECUM'BENS V. S. 7.
Decumbent Meadow-grass.

SP. CH. Panicle close, outer petal hairy at the edge;
straw lying down. *With.* 147. *E. B.* 792. *Syn.*
Festuca. Abbot.

Barren moistish pastures. Rare. July. P.

On Tippin's Hill, near to the footpath leading to
Wetheley.

Obs.

*Outer valve of the blossom larger, with 3 teeth
at the end; the sheath of the leaves hairy.*

Genus 12.

FESTU'CA. Fescue-grass.

NAT. ORD. Gramina.

GEN. CH. Calyx 2 valves; little spike oblong, al-
most cylindrical; husks tapering to a point.

70. FESTU'CA FLU'ITANS V. S. 1.
Floating Fescue-grass.

SP. CH. Panicle branched, upright, spikets nearly
sitting, cylindrical, awnless, pressed close to the
stalk, very long; leaves flat, straw 2-edged. *With.*
156. *Syn. Poa fluitans. E. B.* 1520.

Wet ditches and ponds. Common. June. P.

OBS.

The most succulent of all the grasses; the seeds are very small, but very sweet and nourishing. They have got the name of the manna seeds in Poland, from their nourishing qualities.

71. FESTU'CA PRATEN'SIS V.S. 2.
Meadow Fescue-grass.

SP. CH. Panicle slanting, flowering on one side; spikets awnless, nearly strap-shaped; leaves flat. *E. B.* 1592. *Syn. Var.* 2. *F. elatior.* *With.* 156.

Meadows. June, July. Common. P.

72. FESTU'CA ELA'TIOR V.S. 3.
Tall Fescue-grass.

SP. CH. Panicle at first drooping, nearly upright when in flower; spikelets ovate, pointed, scarcely awned; leaves broad, flat. *With.* 155. *E. B.* 1593.

Meadows and pastures. June, July. Common. P.

73. FESTU'CA BROMOI'DES V.S. 4.
Barren Fescue-grass.

SP. CH. Spikelets upright, smooth; calyx valves, one entire, the other tapering to an awn-like point. *With.* 151. *E. B.* 1411.

On Walls and dry sandy places. May, June. A.
King's Coughton. Astwood.

74. FESTU'CA LOLIA'CEA V. S. 5.
Spiked Fescue-grass.

SP. CH. Spikelets alternate, sitting, compressed,
awnless. *With.* 157. *E. B.* 1821.

Moist meadows. Very rare. August. P.
Badsey Fields. *Rufford.*

75. FESTU'CA PINNA'TA V. S. 6.
Spiked Fescue-grass.

SP. CH. Spikets sitting; straw undivided; awns
shorter than the blossom. *With.* 158. *E. B.*
730.

Chalky soils. Rare. July. P.
Grafton. Badsey. Great Alne.

76. FESTU'CA SYLVAT'ICA V. S. 7.
Wood Fescue-grass.

SP. CH. Spikets sitting; straw undivided; awns as
long as the blossom. *With.* 158. *E. B.* 729.

Woods and hedges. Common. July. P.

OBS.

This very much resembles the pinnata, but is much more hairy, and the awns are as long or longer than the blossom; in the pinnata, the joints

are smooth and silvery; spikets not (as in the sylvatica) pressed close to the spike stalk, but very distant.

Kinwarton. Grafton. Cleve Hill, &c.

Genus 13.

AVE'NA. Oat-grass.

NAT. ORD. Gramina.

GEN. CH. Cup of 2 valves, with many flowers; with a twisted awn on the back.

OBS.

The twisted and jointed awn issuing from the back of the blossom, constitute the essential character.

Species.

77. AVE'NA ELA'TIOR. V. S. 1:
Tall Oat-grass.

SP. CH. Panicked, cup with 2 florets, the one with both stamens and pointals, nearly awnless, the other with only stamens awned. *With.* 163. *Syn.* *Holcus avenaceus.* *E. B.* 813.*

Meadows, hedge sides. Common. June. P.

OBS.

The roots are sometimes very troublesome to the

* See Note 1,

farmers in arable lands. Dr. Abbot regrets that this plant should have been placed in the *Polygamia* class, with the *Holci*; but if we keep strictly to the *Linnæan* mode of classification, that is still the place for it; if on the contrary, we choose a natural Order, then the most suitable, will be among the *Gramina*.

78. AVE'NA FLAVES'CENS V. S. 2.
Yellow Oat-grass.

SP. CH. Panicle loose; cups short, 3 florets in each, all awned. *With.* 165. *E. B.* 952.

Meadows and pastures. Common. June. P.

79. AVE'NA PUBES'CENS V. S. 3.
Rough Oat-grass.

SP. CH. Panicle spike-like; calyx with 3 flowers; blossom bearded at the base; leaves flat, downy. *With.* 165. *E. B.* 1640.

Pastures and Meadows. Common. June. P.

OBS.

The beautiful purplish and silvery white florets, will at once distinguish it.

80. AVE'NA FAT'UA V. S. 4.
Bearded Oat-grass. Wild Oats. Hover.

SP. CH. Panicked; calyx with 3 flowers, all awned and hairy at the base. *With.* 164. *E. B.* 2221.

Cornfields. Common. July. A.

This is sometimes so prevalent amongst barley, as almost entirely to choke it. It may be extirpated by repeated fallowing.

Genus 14.

BRI'ZA. Quaking-grass.

NAT. ORD. Gramina.

GEN. CH. Cup 2 valves, containing several florets; little spikes in 2 rows; valves heart-shaped, blunt, inner valve smallest.

Species:

81. BRI'ZA ME'DIA V. S. 1.
Middle Briza. Middle Quaking-grass.

SP. CH. Little spikes, egg-shaped; calyx shorter than the florets. *With.* 148. *E. B.* 340.

Dry meadows and pastures. Common. July. P.

OBS.

This is a grass so well known that it is scarcely necessary to make any remark. There are seven species, two of which are British plants, the minor and media. The B. major, which is often to be met with in gardens, is also put down in Dr. Withering's Botanical Arrangement, (4th edition) as naturalized.

Genus 15.

LO'LIIUM. Darnel or Ray-grass.

NAT. ORD. Graminæ.

GEN. CH. Cup 1 leaf, fixed, containing several florets; spikets alternate.

Species.

82. LO'LIIUM PEREN'NE : V. S. 1.
Perennial Darnel, or Ray-grass. Rye-grass, &c.

SP. CH. Spike awnless, spikets flat, with many flowers. *With.* 167. *E. B.* 315.

Pastures. June. Common. P.

OBS.

The side of the spike stalk supplies the defect of inner valves; the florets point from two opposite lines.

83. LO'LIIUM ARVEN'SE V. S. 2.
White Darnel. Beardless Darnel.

SP. CH. Spikets awnless, rather shorter than the calyx; calyx 2-valved; straw smooth. *With.* 168. *E. B.* 1125.

Fields about Badsey. July. Rare. A.

OBS.

Whole plant smooth, except the leaves, which are rough when stroked downward. Withering.

Genus 16.

HOR'DEUM. Barley.

NAT. ORD. Gramina.

GEN. CH. Calyx lateral, trifid; 2 valves, containing 1 floret.

Species.

84. HOR'DEUM MURI'NUM V. S. 1.
Wall Barley.

SP. CH. Lateral florets with stamens, awned smooth on the keel; involucrum of the intermediate florets fringed. *With.* 171. *E. B.* 1971.

Walls and road sides. June. Common. P.

85. HOR'DEUM PRATEN'SE V. S. 2.
Meadow Barley.

SP. CH. Lateral florets with stamens, awnless; involucrums bristle-shaped, rough. *With.* 171. *E. B.* 409.

Meadows and moist pastures. Common. June. P.

Obs.

The specific difference between the murinum and pratense is evident enough, the fringed involucrum and the awned stamens of the former, are marks sufficient.

Genus 17.

TRI'TICUM. Wheat.

NAT. ORD. Gramina.

GEN. CH. Cup of 2 valves, solitary, containing about 3 florets; florets blunt, but tapering.

Species.

86. TRI'TICUM RE'PENS V.S. 1.
Creeping Wheat-grass. Dog's-grass. Couch-wheat. Squitch-grass, &c.

SP. CH. Calyx 4-flowered, awl-shaped, tapering to a point; leaves flat. *With.* 173. *E. B.* 909.

Fields, hedges. July. Too common. P.

87. TRI'TICUM CANI'NUM V.S. 2.
Bearded Wheat-grass.

SP. CH. Calyx pointed, mostly 4-flowered; awned; awns longer than the blossom; spikets upright. *With.* 173. *E. B.* 1372.

Woods, hedges. July. Common. P.

Genus 18.

CYNOSU'RUS. Dog's-tail.

NAT. ORD. Gramina.

GEN. CH. Cup of 2 valves, containing several florets; blossom 2 valves; fence winged, composed of scales pointing from 2 opposite lines.

OBS.

In most of the species the fence is like a comb;

the character of the genus is taken from this, which Linnæus calls the receptacle, involucre, or bracte.

Species.

88. CYNOSU'RUS CRISTA'TUS V. S. 1.
Crested Dog's-tail-grass.

SP. CH. Floral leaves with winged clefts. *With.*
150. *E. B.* 316.

Meadows and pastures. June. Common. P.

Var. Spike viviparous. Var 3. Withering.

At Wordsley, near Stourbridge, Worcestershire.
W. Scott, Esq.

OBS.

This is an elegant species; these bractes are pinnatifid, or toothed like a comb; the teeth are long and awl-shaped, and the segments are sharply serrated, with the points upward.

ORDER III.

TRIGYNIA. Three pointals.

Genus 1.

MON'TIA. Blinks.

NAT. ORD. Succulentæ.

GEN. CH. Calyx 2 leaves; blossom 1 petal irregular; capsule 1-celled, 2-valved.

Species.

89. MON'TIA FONTA'NA V.S. 1.
Water Chickweed or Blinks.

SP. CH. ——— With. 174. E. B. 1206.

In wet places. Rather rare. May. A.

OBS.

Flowers minute, seldom entirely open, whence its English name (Blinks,) and the buds nod before they blow; leaves oblong, rather fleshy, ovate, pointed, opposite, 2 at each joint of the stem; stems succulent, trailing; root creeping, very fibrous; blossom white; seeds black, shining.

At Haslor, Warwickshire. *Rufford*. At Malvern, in a Bog on the West side of the Hill, Worcestershire.

CLASS IV.

TETRANDRIA. Four stamens.

ORDER I.

MONOGYNIA. One pointal.

Genus 1.

PLANTA'GO. Plantain.

NAT. ORD. Aggregatæ.

GEN. CH. Calyx 4-cleft; blossom 4-cleft, with the border reflected; stamens very long; capsule 2-celled, opening horizontally, cut round, superior.

Species.

90. PLANTA'GO MA'JOR V.S. 1.
Great Plantain. Way-bread.

SP. CH. Leaves ovate, smooth; stalk round; spike tiled with blossoms. *With.* 192. *E. B.* 1558.
Woodville, 14.

Pastures and road sides. June. Common. P.

91 PLANTA'GO LANCEOLA'TA V.S. 2.
Ribwort Plantain. Rib-grass.

SP. CH. Leaves spear-shaped; spike nearly egg-shaped, naked; stalk angular. *With.* 194. *E. B.* 507.

Pastures and Meadows. May, June. Common.
P.

92. PLANTA'GO ME'DIA V.S. 3.
Middle Plantain. Hoary Plantain.

SP. CH. Leaves egg-spear-shaped; pubescent; spike and stalk cylindrical. *With.* 193. *E. B.* 1559.

Road sides and pastures. June. Common. P.

93. PLANTA'GO CORO'NOPUS V.S. 4.
Buckshorn Plantain.

SP. CH. Leaves strap-shaped, toothed; stem cylindrical. *With.* 195. *E. B.* 892.

Sandy places, gravelly soil. July. Rare. A.

On the side of the Bromsgrove road, between Crab's Cross and Headley's Cross, Worcestershire.

Genus 2.

SANGUISOR'BA. Bloodwort.

NAT. ORD. Miscellaneæ.

GEN. CH. Cup with 2 leaves; seed bud, between the cup and the blossom.

Species.

94. SANGUISOR'BA OFFICINA'LIS . . . V. S. 1.

Burnet Bloodwort. Great Burnet.

SP. CH. Spikes ovate or egg-shaped. *With.* 197. *E. B.* 1312.

Moist meadows. Not common. July. P.

In a field at the bottom of the Bleachfield, on a ditch-bank. Moist meadows at Upton, in Haslor Parish.

OBS.

This grows in moist meadows, the poterium in dry.

Genus 3.

DIPSA'CUS. Teasel.

NAT. ORD. Aggregatæ.

GEN. CH. Common cup of many leaves, proper cup superior. Receptacle chaffy.

Species.

95. DIPSA'CUS SYLVES'TRIS V. S. 1.
Wild Teasel.

SP. CH. Leaves in opposite pairs, united at the base; chaff straight. *With.* 180. *E. B.* 1032.

Hedges, ditch-banks. July. Common. P.

OBS.

The base of the leaves form a cup, which in wet weather is always full of water; in the larger plants I have measured off, full half a pint. A species (D. fullonum) is cultivated for the use of the clothiers, who employ the heads with crooked awns, to raise the knap upon woollen cloths.

96. DIPSA'CUS PILO'SUS V. S. 2.
Small Teasel. Shepherd's Rod.

SP. CH. Leaves on leaf-stalks, with appendages at the base. *With.* 180. *E. B.* 877.

Wet hedges, and damp places. August. Rare P.
Studley Mill. Wixford Lane. Oversley Hill, near to Mr. Silvester's.

Genus 4.

SCABIO'SA. Scabious.

NAT. ORD. Aggregatæ.

GEN. CH. Calyx common, many leaved; proper cup double, superior; receptacle chaffy or naked; seed wrapped in the proper cup.

Species.

97. SCABIO'SA ARVEN'SIS V. S. 1.
Field Scabious.

SP. CH. Blossoms 4-cleft, radiating; leaves winged, jagged; stem rough with strong hairs. *With.* 181. *E. B.* 659.

Cornfields and pastures. June. Common. P.

98. SCABIO'SA SUCCI'SA V. S. 2.
Bitten Scabious. Devil's-bit.

SP. CH. Blossoms 4-cleft, equal; stem undivided; branches approaching; leaves spear-egg-shaped. *With.* 181. *E. B.* 878.

Moist woods and fields. Not rare. August. P.

99. SCABIO'SA COLUMBA'RIA V. S. 3.
Small Scabious.

SP. CH. Blossoms with 5 segments, radiate; leaves at the root ovate, notched; stem leaves winged, bristle-shaped. *With.* 181. *E. B.* 1311.

Mountainous and dry hilly pastures. Common.
June, September. P.

OBS.

The dried leaves of the S. succisa, are used to dye wool yellow or green.

Genus 5.

GA'LIIUM. Bed-straw.

NAT. ORD. Stellatæ.

GEN. CH. Blossom 1 petal, flat; seeds two, nearly globular, inferior.

Species:

100. GA'LIIUM VE'RUM. V. S. 1.
Yellow Bed-straw. Cheese Rening, &c.

SP. CH. Leaves 8 in a whirl, strap-shaped, furrowed; flowering branches short. *With.* 188. *E. B.* 660.

Sides of fields and roads. August. Common. P.

OBS.

The flowers will coagulate boiling milk.

101. GA'LIIUM PROCUM'BENS V. S. 2.
Trailing Bed-straw.

SP. CH. Leaves, 4, 5, or 6 in a whirl, egg-spear-shaped, dagger pointed, smooth; stem prostrate, twisted. Stems and branches matted together; fruit-stalks trebly forked. *With.* 185. *Syn.* *Galium saxatile.* *E. B.* 815.

Heaths and mountains. June. Rare. P.

Studley Common.

102. GA'LIIUM ANG'LICUM V.S. 3.

Small Ladies' Bed-straw. Small Goose-grass.

SP. CH. Leaves about 6 in a whirl, spear-shaped, fringed, with prickly hairs; stem rough with prickles, pointing downward; fruit smooth. *With.*

189. *E. B.* 384.

On walls, sandy ground. July. Rare. P.

On high ground in Oversley Wood.

OBS.

This plant is very rightly named; as the roughness of every part of it, sticking to every thing it touches, makes it very much like the G. Aparine. Ray calls it Aparine minima.

103. GA'LIIUM APARI'NE V.S. 4.

Common Goose-grass. Great Bed-straw. Cleavers.

SP. CH. Leaves in eights, spear-shaped, keels rough, prickles pointed backward; joints woolly; fruit rough. *Woodville*, 269. *With.* 190. *E. B.*

816. *Abbot*, 119.

Hedges and cornfields. July. Common. A.

104. GA'LIIUM MOLLU'GO V. S. 5.
Great Hedge Bed-straw. Great Bastard Mad-
der. White Ladies' Bed-straw.

SP. CH. Leaves 8 in a whirl, egg-strap-shaped,
dagger pointed, somewhat serrated, greatly ex-
panded; stem weak; branches spreading. *With.*
187. *E. B.* 1673. *Abbot*, 118.

Hedges, roughs. July. Common. P.

OBS.

The whole plant is smooth to the touch.

105. GA'LIIUM PALUS'TRE V. S. 6.
White Water Bed-straw. Marsh Bed-straw.

SP. CH. Leaves unequal, strap-spear-shaped, en-
tire, smooth, blunt, 4, 5, or 6 in a whirl; stems
rough, spreading. *With.* 184. *E. B.* 1857.
Abbot, 113.

Marshes, wet ditches and commons. July. Com-
mon. P.

106. GA'LIIUM TRICOR'NE : V. S. 7.
Three-horned Corn Bed-straw.

SP. CH. Flowers with stamens, 3-cleft, on pedicels
springing from the fruit-stalks of the flowers,
containing both stamens and pointal. *E. B.*
1641. *Syn. G. spurium.* *With.* 187.

Cornfields on a lime-stone soil. June, July. Rare.
A.

OBS.

Fruitstalks bearing 3 flowers, curved downward; the trivial name from this circumstance is very appropriate.

On Alne Hills. *Rufford*. In a Cornfield by Drayton Bushes.

107. GA'LIIUM ULIGINO'SUM V.S. 8.

Bog Bed-straw. Rough Marsh Bed-straw.

SP. CH. Leaves in sixes, spear-shaped, dagger-pointed, stiff, bowed backwards, serrated with prickles; blossoms larger than the fruit. *With.* 186. *E. B.* 1972. *Abbot*, 114.

Bogs and marshy places. July. Rare. P.

Feckenham Bog, Worcestershire. Coleshill Bog, Warwickshire.

Genus 6.

SHERAR'DIA. Field Maddar.

NAT. ORD. Stellatæ.

GE. CH. Blossom 1 petal, funnel-shaped; seeds 2, with three teeth.

Species.

108. SHERAR'DIA ARVEN'SIS V.S. 1.

Blue Sherardia. Little Field Maddar. Spurwort.

SP. CH. All the leaves in whirls; flowers terminating. *With.* 183. *E. B.* 891. *Abbot*, 110.

Corn and fallow fields. June. Common. A.

OBS.

The whole plant trails; the 3 teeth crowning the seed is the essential generic difference.

Genus 7.

COR'NUS. Cornel.

NAT. ORD. Dumosæ.

GEN. CH. Fence often with 4 leaves; petals 4, superior, nut of 2 cells, covered with a pulp.

Species.

109. COR'NUS SANGUIN'EA V. S. 1.
Wild Cornel Tree. Bloody-twigg.

SP. CH. Branches straight; leaves ovate, of an uniform colour; cymes or tufts flat. *With.* 198.
E. B. 249. *Abbot*, 122.

Woods and hedges. June. Common. T.

OBS.

The leaves change to a blood red in the autumn. The wood is very hard and smooth, fit for the purposes of the turner; the berries are bitter and styptic; they dye purple.

Genus 8.

ASPE'RULA. Woodruff.

NAT. ORD. Stellatæ.

GEN. CH: Blossom 1 petal, funnel shaped ; seeds 2, round.

OBS.

The essential distinction between Asperula and Galium, is taken from the length of the tube of the blossom, which in their respective extremes is sufficiently obvious.

Species.

110. ASPE'RULA ODORA'TA V. S. 1.
Sweet Woodruff. Woodrooff.

SP. CH. Leaves 8 in a whirl, spear-shaped ; flowers in bundles, on fruit-stalks. *With.* 183: *E. B.* 755. *Abbot*, 111:

Woods. May. Not rare. P.

Oversley. Sernal. Ragley Woods.

OBS.

It is spelt Woodderowffe in some old authors; the repetition of the double letters affords great amusement to children learning to spell. It is sweet scented, and the odour is said to drive away ticks and other insects. It gives a grateful flavour to wine. Most of the genera in the order Stellatæ,

resemble each other so much, that in some authors they have been reduced into one genus.

Genus 9.

ALCHEMIL'LA. Ladies'-mantle.

NAT. ORD. Senticosæ.

GEN. CH. Cup eight divisions; blossom none; 1 seed or 2, inclosed by the cup.

Species.

111 ALCHEMIL'LA VULGA'RIS (*See fig. 1.*) V.S. 1.
Common Ladies'-mantle.

SP. CH. Leaves lobate, or gashed. *With.* 202.

E. B. 597. *Abbot*, 123. *Parkinson*, 538. 1.

Dry meadows and pastures. Rare. June. P.

Tanworth, and at the foot of the stone steps leading to Mr. Westcombe's, Oversley.

OBS.

I agree with Dr. Abbot, the author of the Bedford Flora, that this is one of the most elegant of all our native plants.

ORDER IV.

TETRAGYNIA. Four pointals.

Genus 1.

I'LEX. Holly.



NAT. ORD. Dumosæ.

GEN. CH. Cup with 4 teeth, blossom wheel-shaped, style none; berry containing 4 seeds.

Species.

112. I'LEX AQUIFO'LIUM 1.
Common Holly.

SP. CH. Leaves ovate, acute, thorny, on leaf-stalks; flowers in a kind of umbel, axillary. *With.* 208.
E. B. 496. *Abbot*, 127.

Genus 2.

SAGI'NA. Pearlwort.

NAT. ORD. Caryophylleæ.

GEN. CH. Cup of 4 leaves; petals 4; seed-vessel 1-celled, 4-valved; with many seeds.

Species.

113. SAGI'NA PROCUM'BENS V.S. 1.
Procumbent or trailing Pearlwort.

SP. CH. Branches trailing. *With.* 213. *E. B.* 880. *Abbot*, 136.

Walls, roofs, gravel walks, paved courts, and also moist boggy places. July. Common. P.

114 SAGI'NA EREC'TA 2.
Upright Pearlwort.

SP. CH. Stem erect, with seldom more than one flower. *With.* 213. *E. B.* 609. *Abbot*, 138.

Gravelly soil, heaths. April: Rare. A.

Coleshill Heath, Warwickshire. *Bree*. Malvern Hill, Worcestershire.

OBS.

Stem 3 or 4 inches high; petals four; shorter than the cup, yet larger than in the other species.

Genus 3.

POTAMOGE'TON. Pondweed.

NAT. ORD. Inundatæ.

GEN. CH. Cup none; petals 4; style none; seeds 4.

Species.

115. POTAMOGE'TON PERFO'LIATUM . . V.S. 1.
Perfoliate Pondweed:

SP. CH. Leaves heart-shaped, embracing the stem.
With. 209. *E. B.* 168. *Abbot*, 129.

Rivers: July. Common. P.

116. POTAMOGE'TON NA'TANS . . . V.S. 2.
Floating Pondweed. Broad-leaved Pondweed.

SP. CH. Leaves oblong-egg-shaped, on leaf stalks floating. *With.* 209. *E. B.* 1822. *Abbot*, 128.

Ponds and slow rivers. July. Common. P.

117. POTAMOGE'TON CRIS'PUM . . . V. S. 3.

Curled Pondweed. Great Water Caltrop.

SP. CH. Leaves spear-shaped, alternate or opposite, waved, serrated. *With.* 210. *E. B.* 1012.

Ponds and slow streams. June. Common. P.

118. POTAMOGE'TON GRAMIN'EUM . . V. S. 4.

Grass-leaved Pondweed.

SP. CH. Leaves strap-spear-shaped, alternate, distinct, sitting; the base sheathing the stem, parallel, near together. *With.* 411. *E. B.* 2253.

Rivers and ditches. July. Common. P.

119. POTAMOGE'TON LU'CENS . . . V. S. 5.

Shining Pondweed.

SP. CH. Leaves long and spear-shaped, sitting, upper ones opposite. *With.* 210. *E. B.* 376.

Rivers and ponds. July. Not common. P.

River Avon, and ponds about Bidford.

120. POTAMOGE'TON DEN'SUM . . . V. S. 6.

Close-leaved Pondweed.

SP. CH. Leaves ovate, pointed, opposite, crowded; stem forked; spike with 4 flowers. *With.* 210. *E. B.* 397. *Abbot*, 131.

Ponds and ditches. June. Rare. P.

In ponds and ditches on each side the road, between
Red-hill and Stratford-upon-Avon.

OBS.

*The spike of flowers sprouts from the fork of the
stem, sitting on a short fruit-stalk, bent back,
and resembles the flowers of the Adoxa.*

CLASS V.

PENTANDRIA. Five stamens.

ORDER I.

MONOGYNIA. One pointal.

Genus 1.

MYOSO'TIS. Scorpion-grass.

NAT. ORD. Asperifoliæ.

GEN. CH. Blossom salver-shaped, 5-cleft, lobes
notched; mouth closed with projecting scales.

Species.

121. MYOSO'TIS PALUS'TRIS V.S. 1.
Marsh Scorpion Grass.

SP. CH. Seeds smooth; cups inversely egg-shaped,

blunt, smooth, as long as the tube of the blossom ;
leaves spear-shaped. *With.* 221. *E. B.* 1973.

Wet ditches. Common. May, July. P.

OBS.

From 6 to 12 inches high; flowers in a long spike-like bunch, twisted spirally at the top; blossom, fine blue; valves forming a bright yellow eye, covering the anthers which are in the hollow underneath.

122. MYOSO'TIS ARVEN'SIS V. S. 2.
Field Scorpion-grass.

SP. CH. Seeds smooth; cups egg-shaped, tapering to a point, very hairy, and longer than the tube of the blossom; leaves egg-spear-shaped. *With.* 221. *E. B.* 2558.

Walls, cornfields, gardens and sandy places. May, June. Common. A.

OBS.

The former is a perennial, the latter an annual; the arvensis is also a much smaller plant than the palustris; sometimes very diminutive.

Genus 2.

SYM'PHYTUM. Comfrey.

NAT. ORD. Asperifoliæ.

GEN. CH. Blossom funnel-shaped, bellying towards the top; mouth closed by hollow radiate valves, which have an open hole on the outside near the border; nuts 4, perforated.

Species.

123. SYM'PHYTUM OFFICINA'LE . . . V. S. 1.
Common Comfrey.

SP. CH. Leaves between ovate and lance-shaped, running down the stem; cup closing, the whole length of the tube of the blossom. *With.* 226.
E. B. 817. *Woodville*, 215.

Banks of rivers. Rare. May. P.

River Arrow, near Oversley Bridge, &c.

OBS.

There are two varieties, one with a yellow white blossom, and another with a purplish tinge, in the latter the calyx expands and is shorter than the tube of the blossom. Syn. S. patens (Sibthorpe.) The whole of this plant is very nutritious. (Withering and Woodville.)

Genus 3.

CYNOGLOS'SUM. Hound's-tongue.

NAT. ORD. Asperifoliæ.

GEN. CH. Blossom funnel shaped; mouth closed by projecting valves; nuts 4, depressed, fixed to the style by the inner side only, imperforated.

OBS.

The essence of the genus consists in having four seed coats fixed to the style, each containing one seed.

Species.

124. CYNOGLOS'SUM OFFICINA'LE . . . V.S. 1.

Common Hound's-tongue.

SP. CH. Stamens shorter than the blossom; leaves broad, spear-shaped, downy, sitting. *With.* 123.
E. B. 921. *Woodville*, 216.

Road sides and amongst rubbish. June. Common. P.

OBS.

Its scent is very disagreeable, and very much resembles that of mice. A decoction of the roots inwardly, and poultices of them outwardly, have been recommended in strumous and scrophulous cases.

Genus 4.

E'CHIUM. Viper's Bugloss.

NAT. ORD. Asperifoliæ.

GEN. CH. Blossom irregular; the mouth open.

Species.

125. E'CHIUM VULGA'RE . . . V.S. 1.

Common Viper's Bugloss.

SP. CH. Stem rough, with hairy tubercles; stem leaves spear-shaped, rough with hairs; flowers in lateral spikes. *With.* 228. *E. B.* 181.

Sandy cornfields, in a calcareous soil, walls, and on rubbish. Not very rare. July. P.

Salford, on a wall opposite Mr. Penrice's, and about the lime-kilns at Grafton.

OBS.

This is a beautiful shewy plant. Bees are fond of the flowers, but their wings are often torn by its strong bristly hairs.

Genus 5.

LYCOP'SIS. Bugloss.

NAT. ORD. Asperifoliæ.

GEN. CH. Tube of the blossom crooked; mouth closed with scales; nuts 4, perforated.

Species.

126. LYCOP'SIS ARVEN'SIS V. S. 1.
Wild Bugloss.

SP. CH. Leaves spear-shaped, rough with hair; calyx while in flower upright. *With.* 227. *E. B.* 938.

Cornfields and road sides. Not very rare. July.
A.

OBS.

An extremely harsh, rough and bristly plant; leaves sometimes nearly strap-shaped, sometimes egg-shaped, waved at the edge; blossom a sky-blue.

Genus 6.

BORA'GO. Borage.

NAT. ORD. Asperifoliæ.

GEN. CH. Blossom wheel-shaped; mouth closed with rays; nuts 4, not perforated.

Species.

127. BORA'GO OFFICINA'LIS V.S. 1.
Common Borage.

SP. CH. All the leaves alternate; cups expanding.
With. 226. E. B. 36. Woodville, 217.

Road sides and among rubbish. July, August.
Rare. A.

Among some rubbish in a field by Arrow Turnpike.

OBS.

It is an ingredient in cool tankards for summer drinking; the young and tender leaves are good in salads, or as a pot-herb.

Genus 7.

LITHOSPER'MUM. Gromwell.

NAT. ORD. Asperifoliæ.

GEN. CH. Blossom funnel-shaped, tube long, slender, open and without valves at the mouth; calyx with 5 divisions; nuts 4, very hard, imperforated.

Species.

128. LITHOSPER'MUM OFFICINA'LE . . . V.S. 1.
Common Gromwell or Gromill.

SP. CH. Seeds smooth, polished, resembling pearls; blossom scarcely longer than the cup; leaves spear-shaped. *With.* 222. *E. B.* 134. *Woodville*, 213.

Dry gravelly soil, woods and hedges. Rare. June.
P.

Great Alne. Oversley Wood.

129. LITHOSPER'MUM ARVEN'SE . . . V.S. 2.
Corn Gromwell. Painting Root.

SP. CH. Seeds rough; blossoms hardly longer than the cups. *With.* 222. *E. B.* 123.

Cornfields. June. Common. A.

OBS.

The girls in the North of Europe paint their faces with the juice of the root upon days of festivity. The bark of the root tinges wax and oil

of a beautiful red, similar to that which is obtained from the root of the foreign Alkanet, that is kept in the shops. *Withering.*

Genus 8.

PRI'MULA. Primrose.

NAT. ORD. Preciæ.

GEN. CH. An involucre under the flower, or knot of flowers; the corol funnel-shaped or salver-shaped, with the tube cylindric and open at the top; the stigma globose; capsule unilocular or 1-celled.

Species.

130. PRI'MULA VULGA'RIS V.S. 1.
Common Primrose.

SP. CH. Stemless, leaves wrinkled, toothed, hairy underneath; stalk with one flower. *With.* 229.
E. B. 4. *Syn. P. acaulis.* *Abbot*, 150.

Woods and hedges. March, April, May. Common. P.

UES.

Gerard reports that a dram and a half of the dried roots taken up in autumn, operates as a strong but safe emetic. Silk worms may be fed with the leaves. Withering.

131. PRI'MULA OFFICINA' LIS V. S. 2.

Cowslip.

SP. CH. Leaves wrinkled, toothed, hairy underneath; stalks with many flowers, nodding; border of the blossom short, concave. *With.* 230. *E. B.* 5. *Abbot*, 151.

Meadows and pastures. April, May. Common. P.

OBS.

The leaves are sometimes eaten as a pot-herb, and in salads; the blossoms are used for making wine. Silk worms are fond of the leaves and flowers.

132. PRI'MULA ELA'TIOR V. S. 3.

Oxlip.

SP. CH. Leaves wrinkled, toothed, hairy; stalks with many flowers, outermost flower nodding, and central one upright; border of the blossom flat. *With.* 230. *E. B.* 513. *Abbot*, 152.

Woods and thickets, sometimes pastures. April, May. Common. P.

Genus 9.

ANAGAL' LIS. Pimpernel.

NAT. ORD. Rotaceæ.

GEN. CH. Blossom wheel-shaped; capsule cut round, of 1 cell, and many seeds.

Species.

133. ANAGAL' LIS ARVEN' SIS V. S. 1.
Scarlet Pimpernel.

SP. CH. Leaves entire; stem trailing. *With.* 234.
E. B. 529. *Abbot*, 158.

Cornfields. May. Common. A.

134. ANAGAL' LIS CÆRU' LEA V. S. 2.,
Blue Pimpernel.

SP. CH. Leaves between ovate and spear-shaped;
segments of the cup more sharply pointed. *With.*
234. *Var.* 2. *E. B.* 1823. *Abbot*, 159.

Cornfields. May. Rare. A.

Bickmarsh. Bidford. Grafton.

OBS.

“Leaves in both species are dotted underneath.”
*Every part of this plant is singularly beautiful,
and will amply repay the trouble of a minute ex-
amination.*

135. ANAGAL' LIS TENEL' LA V. S. 3.
Bog Pimpernel.

SP. CH. Leaves egg-shaped, rather acute; stem
creeping, striking root at the joints. *With.* 235.
E. B. 530. *Abbot*, 160.

Wet heaths and turfy bogs. July. Rare. P.

Feckenham Bog, Worcestershire. Coleshill Bog,
Warwickshire.

OBS.

The leaves not dotted underneath, egg-shaped, or heart-shaped, or circular; blossom a pale purplish red, each segment marked with 7 darker streaks. These three plants are the most beautiful and elegant imaginable.

Genus 10.

CONVOL'VULUS. Bindweed.

NAT. ORD. Campanaceæ:

GEN. CH. Blossom bell-shaped, plaited; honey-cup or nectary, surrounding the base of the germen; stigmas 2; capsule 2 or 3 cells, 2 seeds in each.

Species.

136. CONVOL'VULUS ARVEN'SIS . . . V.S. 1.
Field Bindweed.

SP. CH. Leaves arrow-shaped, acute on each side; fruit-stalks bearing generally 1 flower. *With.*
235. *E. B.* 312. *Abbot*, 162.

Fields and road sides. June. Common. P.

137. CONVOL'VULUS SE'PIUM . . . V.S. 2.
Great Bindweed. English Scammony.

SP. CH. Leaves arrow-shaped, blunt on each side,

or lopped at the base; fruit-stalk 4-cornered, bearing one flower. *With.* 236. *E. B.* 313. *Parkinson*, 163. 3. *Abbot*, 163.

Moist hedges. July. Common. P.

OBS.

The large size of its fine milk white blossoms, makes it a beautiful ornament to our hedges. The extract or inspissated juice is almost as powerful as the Scammony of the shops, (and may be substituted for it) which is also of the convolvulus family.

Genus 11.

CAMPA'NULA. Bell-flower.

NAT. ORD. Campanacæ.

GEN. CH. Blossom bell-shaped, closed at the base by valves which support the stamens; stigma trifid or 3-cleft; germen under the flower; capsule opening with holes in the sides.

Species.

138. CAMPA'NULA LATIFO'LIA . . . V.S. 1.

Broad-leaved Bell-flower. Giant Throat-wort.

SP. CH. Leaves egg-spear-shaped; stem very simple, round, flowers single, on fruit-stalks; capsules nodding. *With.* 238. *E. B.* 302. *Abbot*, 165.

Woods and hedges. July. Not very rare. P.

Banks of the river Arrow, the Alne, &c.

OBS.

Stem 5 feet high; blossom large, of a splendid purple; it is generally found by the sides of rivers, or of wet ditches.

139. CAMPANULA ROTUNDIFOLIA . . . V. S. 2.
Round-leaved Bell-flower.

SP. CH. Radical or root leaves kidney-shaped; stem leaves strap-shaped, very entire. *With.* 237.

E. B. 866: *Parkinson*, 651. 11. *Abbot*, 164.

Heaths, road sides, on hedge-banks. August. Common. P.

OBS.

Unless you are accurate in your search, the little round, or more properly, heart or kidney-shaped leaves will be over-looked; as they lie close to the root. A green pigment is obtained from the juice of the petals.

140. CAMPANULA TRACHELIUM . . . V. S. 3,
Nettle-leaved Bell-flower. Throat-wort Bell-flower. Canterbury Bells.

SP. CH. Stem angular; leaves on leaf-stalks, cups fringed; fruit-stalks in threes; stem hairy. *With.* 239. *E. B.* 12. *Abbot*, 166.

Woods and hedges. July. Common. P.

141. CAMPA'NULA HY'BRIDA V.S. 4.
Corn Bell-flower.

SP. CH. Stem somewhat branched at the base; stiff and straight; leaves oblong, scolloped; cups incorporated, longer than the blossom; capsules prism-shaped. *With.* 241. *E. B.* 375. *Park.* 1331. 2. *Abbot*, 168.

Chalky cornfields. Rare. July. A.

Alne Hills. *Rufford*.

142. CAMPA'NULA PA'TULA V.S. 5.
Field Bell-flower.

SP. CH. Leaves stiff and straight; root leaves spear-egg-shaped; panicle expanding; stem 5-cornered. *With.* 238. *E. B.* 42. *Robson*, p. 76.

Woods, hedges, and road sides. Rather rare. July. P.

On the side of Oversley Hill, by the foot-path leading to Mr. Westcombe's. On the side of Spermal Park, in the road leading to Moreton-Bagot, Warwickshire. About Enville, in Staffordshire, plentiful.

143. CAMPA'NULA GLOMERA'TA V.S. 6.
Clustered Bell-flower.

SP. CH. Stem angular, simple; flowers sessile or sitting, mostly terminating. *With.* 239. *E. B.* 90. *Abbot*, 167. *Robson*, 76.

Mountains and chalky pastures. Rare. July. P.
Above Roll's-wood, on the side of the road to
Grafton.

Genus 12.

SA'MOLUS. Water-pimpernel.

NAT. ORD. Preciæ.

GEN. CH. Blossom salver-shaped; stamens protect-
ed by the valves of the blossom; capsule with 1
cell, inferior.

Species.

144. SA'MOLUS VALERAN'DI . . . V. S. 1.
Round-leaved Water-pimpernel. *With.* Pim-
pernel Brookweed. *Abbot.*

SP. CH. ——— *With.* 243. *E. B.* 703. *Park.*
1237. 5. *Abbot*, 169.

Banks of rivers. Salt marshes and bogs. July.
Rare. P.

River Alne, above Oversley. In some boggy
ground near Bidford Grange.

OBS.

*This plant has been found at Botany Bay; what
a treat to the Botanist, to meet with an old ac-
quaintance so far off. The plant is a foot and
more in height; stem feeble; corol white.*

Genus 13.

LYSIMA'CHIA. Loosetrife.

NAT. ORD. Rotaceæ.

GEN. CH: Blossom wheel-shaped; capsule globular, pointed, with 10 valves.

Species.

145. LYSIMA'CHIA NUMMULA'RIA . . . V. S. 1.
Money-wort. Herb-twopence. Money-wort
Loosetrife.

SP. CH. Leaves nearly heart-shaped; flowers solitary; stem creeping. *With.* 234. *E. B.* 528.

Wet meadows and ditches. June. Common. P.

146. LYSIMA'CHIA NEM'ORUM . . . V. S. 2.
Wood Loosetrife. Wood Pimpernel.

SP. CH. Leaves ovate, acute; flowers solitary; stem trailing. *With.* 233. *E. B.* 527. *Abbot*, 156.

Woods and moist shady places. June. Not very rare. P.

Oversley Wood. Ragley Woods. Spernal Park.

OBS.

The blossom is very much unlike the preceding species, it is much smaller, and in form and figure resembles that of the pimpernel.

147. *LYSIMA'CHIA VULGA'RIS* . . . V. S. 3.
Common Loosetrife.

SP. CH. Panicked, bunches terminal. *With.* 233.
E. B. 761. *Abbot*, 155. *Robson*, 73.

Banks of rivers and watery places. July. Rare.
P.

On the side of the Avon, below Bidford Grange,
opposite the Flood-gates. This is a most beau-
tiful plant, and would be an ornament to any
garden.

Genus 14.

MENYAN'THES. Buckbean.

NAT. ORD. Rotaceæ.

GEN. CH. Blossom hairy or fringed; stigma 2-lo-
bed; capsule with 1 cell.

Species.

148. *MENYAN'THES TRIFOLIA'TA* : . V. S. 1.
Common Buckbean.

SP. CH. Leaves growing by threes or ternate; the
segments of the blossom entire at the edge, shag-
gy on the upper surface. *With.* 495. *Wood-*
ville, 2. *E. B.* 495. *Abbot*, 153. *Robson*, 72.

Marshy and boggy places. June. Rare. P.

In a pit on Alne Hills. At Shelfield. *Rufford*.
Coleshill Bog. *Bree*. Bell's Mill, near Stour-
bridge. *W. Scott, Esq.*

Genus 15.

HOTTO'NIA. Water-violet.

NAT. ORD. Campanaceæ.

GEN. CH. Blossom salver-shaped; stamens fixed to the top of the tube; capsule with 1 cell.

Species.

149. HOTTO'NIA PALUS'TRIS . . . V.S. 1.
Water-violet.

SP. CH. Fruit-stalks whirled, with many flowers.
With. 232. *E. B.* 364. *Abbot*, 154. *Robson*,
72.

Ponds and ditches. June. Very rare. P.

Tamworth, Staffordshire. *Bree*. Walsall. *Ruf-*
ford.

Genus 16.

POLEMO'NIUM. Greek Valerian.

NAT. ORD. Rotaceæ.

GEN. CH. Blossom wheel-shaped or rotate, 5-cleft;
filaments broad and membranaceous at the base;
stigma 3-cleft; capsule with 3 cells; seeds an-
gular.

Species.

150. POLEMO'NIUM CÆRU'LEUM . . . V.S. 1.
Common Jacob's Ladder.

SP. CH. Leaves winged; flowers upright; calyx longer than the tube of the blossom. *With.* 237.

E. B. 14. *Park.* 1256. 4. *Robson*, 75.

At the Lover's Leap, Buxton, Derbyshire. *Mr. Wood.* *Withering.*

OBS.

I have not met with it wild, but as it is an indigenous plant, and so common in all gardens, it may be useful in a work of this kind; it blossoms in June.

Genus 17.

LONICE'RA. Honeysuckle.

NAT. ORD. Sepiariæ.

GEN. CH. Blossom of 1 petal, tubular, irregular; berry beneath, with many seeds, 2-celled.

Species.

151. LONICE'RA PERICLY'MENUM . . V. S. 1.
Common Honeysuckle. Woodbine.

SP. CH. Heads egg-shaped, tiled, terminating; leaves distinct, deciduous; blossom gaping. *With.* 243.

E. B. 800. *Abbot*, 170. *Robson*, 57.

Woods and hedges. July. Common. S.

Genus 18.

VERBAS'CUM. Mullein.

NAT. ORD. Solanaceæ.

GEN. CH. Blossom wheel-shaped, nearly regular; capsule trilocular or with 3 cells, bivalve or with 2 valves; polyspermous or with many seeds.

OBS.

In most of the species, the stamens are inclining, unequal; and the bottom of the threads or filaments is clothed with soft coloured hairs.

Species.

152. VERBAS'CUM THAP'SUS. . . . V.S. 1.
Great Mullein. High-taper.

SP. CH. Leaves decurrent, or running down the stem, cottony on both sides; stem unbranched; stigma globular. *With.* 245. *Woodville*, 125. *E.B.* 549. *Abbot*, 171. *Robson*, 75.

Road sides on ditch banks. July. Common. B.

OBS.

It has considerable medicinal qualities. "The down serves for tinder."

153. VERBAS'CUM NI'GRUM V.S. 2.
Black Mullein.

SP. CH. Leaves oblong, heart-shaped, on leaf-stalks. *With.* 247. *E.B.* 59. *Abbot*, 172. *Robson*, 75.

Hedges and road sides. July. Rare. B.

About Stourbridge, on the side of the Bromsgrove Road, &c. Worcestershire.

OBS.

The filaments are beautifully beset with purple coloured hairs.

154. VERBAS' CUM VIRGA' TUM 3.
Virgate or Rod-like Mullein. Large-flowered Mullein.

SP. CH. Root-leaves somewhat lyre-shaped; stem leaves sitting; stem branching; fruit-stalks several together, sitting. *With.* 247. *E. B.* 550.

Road sides. July. Rare. B.

Discovered by the *Rev. W. S. Rufford*, in the neighbourhood of Worcester, where it was first found by *Mr. Waldron Hill*, of that place. I have since met with it, on the side of the road from Worcester to Ombersley.

155. VERBAS' CUM BLATTA' RIA . . . V.S. 4.
Moth Mullein.

SP. CH. Leaves embracing the stem, oblong, smooth, somewhat wrinkled; fruit-stalks solitary. *E. B.* 393. *With.* 248. *Robson*, 75.

Gravelly soil. Rare. July. A.

South Littleton, near Badsey, Worcestershire.
Common about Durnsley and Kinver, Staffordshire. *Scott.*

Genus 19.

DATU'RA. Thorn-apple.

NAT. ORD. Solanaceæ.

GEN. CH. Blossom funnel-shaped, plaited; calyx tubular, angular, falling off with the blossom; capsule with 4 valves.

Species.

156. DATU'RA STRAMO'NIUM V. S. 1.
Common thorn-apple.

SP. CH. Seed-vessel thorny, upright, ovate; leaves ovate smooth. *With.* 248. *Woodville*, 124.
E. B. 1288. *Robson*, 78.

Amongst rubbish, on dunghills. July. Rare. A.
Salford. Alcester.

Genus 20.

HYOSCY'AMUS. Henbane.

NAT. ORD. Solanaceæ.

GEN. CH. Blossom funnel-shaped, blunt; stamens inclining; capsule with 2 cells, with a lid; seeds many, kidney shaped.

Species.

157. HYOSCY'AMUS NI'GER V. S. 1.
Common Henbane.

SP. CH. Leaves embracing the stem, waved ; flowers sitting. *With.* 249. *Woodville*, 52. *E. B.* 591.

Road sides, amongst rubbish. Jnne. Not very rare. B.

Great Alne. Wixford, &c.

OBS.

The whole has a strong and peculiar odour; is woolly and remarkably clammy. The inspissated juice is a powerful anodine, and is a very useful medicine under proper management.

Genus 21.

A'TROPA. Deadly Nightshade.

NAT. ORD. Solanaceæ or Luridæ.

GEN. CH. Blossom bell-shaped ; stamens distant ; berry globular, with 2 cells.

Species.

158. A'TROPA BELLADON'NA V. S. 1.
Deadly Nightshade.

SP. CH. Stem herbaceous ; leaves egg-shaped, pointed, entire. *Woodville*, 1. *With.* 250. *E. B.* 592. *Abbot*, 174. *Robson*, 57.

Woods and Road sides. June. Rare. P.

Found growing about the ruins of Dudley Castle, Worcestershire, last year, 1815. *Rufford*. Bell's Mill, near Stourbridge. *Scott*.

OBS.

The juice of this plant has been found very useful to the Oculist, by its having the peculiar property (on applying it externally) of dilating the pupil.—It is one of the most active and deleterious vegetable poisons, we have, among all our indigenous plants. The juice of the ripe berries stains paper of a beautiful and durable purple.

Genus 22.

SOLA'NUM. Nightshade.

NAT. ORD. Solanaceæ.

GEN. CH. Blossom wheel-shaped ; anthers almost united, opening at the point with a double pore ; berry 2-celled.

Species.

159 SOLA'NUM DULCA'MARA . . . V. S. 1.

Woody Nightshade. Bitter-sweet.

SP. CH. Stem thornless, shrubby, zigzag ; upper leaves halberd-shaped ; flowers in tuft-like bunches. *With.* 250. *Woodville*, 33. *E. B.* 565.

Moist brakes, hedges, and sides of ditches. June, August. Common. S.

160. SOLA'NUM NI'GRUM V. S. 2.

Common Nightshade. Garden Nightshade.

SP. CH. Stem thornless, herbaceous ; leaves ovate, tooth angular ; bunches nodding, pointing two ways. *With.* 251. *E. B.* 566. *Woodville*, 226. *Abbot*, 176. *Robson*, 57.

Amongst rubbish, on dunghills, and often in kitchen gardens. June. Common. A.

OBS.

Both these species of Solanums are reported to have considerable medical qualities.

Genus 23.

RHAM'NUS. Buckthorn.

NAT. ORD. Dumosæ.

GEN. CH. Cup tubular, with scales fencing the stamens ; blossom none ; fruit a berry.

Species.

161. RHAM'NUS CATHAR'TICUS V. S. 1.

Purging Buckthorn.

SP. CH. Thorns terminating ; flowers with four segments, diæcious, or stamens and pointal on different plants ; leaves ovate. *Woodville*, 114. *With.* 253. *E. B.* 1629. *Abbot*, 177. *Robson*, 59.

Woods and hedges. May. Not common. S. Bidford, Warwickshire. Harvington, Worcester-shire.

162 RHAM'NUS FRANGU'LA . . . V. S. 2.

Alder Buckthorn. Berry-bearing Alder.

SP. CH. Flowers with one pointal, florets with stamens and pointal; leaves very entire. *With.* 254. *E. B.* 250. *Park.* 240. *Abbot,* 178. *Robson,* 59.

Woods and hedges. May. Not rare. S.

Grafton. Arrow. Great Alne, &c.

OBS.

A purgative syrup is prepared from the berries of the catharticus. The juice of the ripe berries mixed with alum is the sap green of the painters. The bark affords a beautiful yellow dye. Withering. The same properties belong to the frangula, but in a much weaker degree.

TO THE DRUGGISTS.

The berries of the last species (R. Frangula) are often gathered for the catharticus.

Genus 24.

EUO'NYMUS. Spindle-tree.

NAT. ORD. Dumosæ.

GEN. CH. Blossom 5 petals; capsule 5 angles, 5 cells, 5 valves, coloured; seeds with a veil.

Species.

163. EUO'NYMUS EUROPE'US . . . V.S. 1.

Common Spindle-tree.

SP. CH. Flowers mostly 4-cleft; leaves sitting.
With. 254. *E. B.* 362. *Park.* 241. 1. *Abbot,*
 179. *Robson,* 105.

Woods, hedges. May. Rare. S.

Oversley Wood. Wetheley Wood.

OBS.

The berries vomit and purge violently; they are fatal to sheep; powdered and sprinkled upon the hair they destroy lice. The wood is used by watch-makers, for cleaning watches and to make tooth-picks, &c. &c. Horses refuse it. Cows are so fond of the shoots in spring, as constantly to break down the banks of the fields wherever a plant of it stands. Withering.

Genus 25.

HE'DERA. Ivy.

NAT. ORD. Hederaceæ.

GEN. CH. Petals 5, oblong; berry with seeds 5, bound round by the calyx.

164. HE'DERA HE'LIX V.S. 1.
 Common Ivy.

SP. CH. Leaves both ovate and lobed. *With.* 262.
E. B. 1267. *Abbot,* 181. *Robson,* 63.

Woods and hedges. September. Common. S.

OBS.

The roots are used by leather-cutters to whet

their knives upon. Sheep are very fond of the bark and leaves. The berries purge and vomit. Withering.

Genus 26.

VIN'CA. Periwinkle.

NAT. ORD. Contortæ.

GEN. CH. Blossom salver-shaped; seed-vessel, 2 upright little bags; seeds naked. *With.*

Species.

165. VIN'CA MA'JOR V. S. 1.
Great Periwinkle.

SP. CH. Stems erect; leaves egg-shaped; flowers on fruit-stalks; leaves fringed at the edge. *With.*

264. *E. B.* 514. *Abbot*, 183. *Robson*, 151.

Woods and hedges. April. Rare. P.

King's Coughton. Oversley.

166. VIN'CA MI'NOR 2.
Lesser Periwinkle.

SP. CH. Stems trailing, leaves spear-ovate, smooth, flowers on fruit-stalks. *With.* 264. *Abbot*, 182.

E. B. 917. *Abbot*, 182. *Robson*, 150.

Woods, hedges. April. Rare. P.

Fillongly. Allesley. *Bree*.

OBS.

The specific distinction between the vinca major and minor appears to be that the former is erect, the latter trailing; also in the leaves, the major has the edges fringed with hairs, in the minor they are smooth.

Genus 27.

CHIRO'NIA. Centaury.

NAT. ORD. Rotaceæ.

GEN. CH. Blossom wheel-shaped. Pointal bowed down; filaments sitting on the tube of the blossom; anthers becoming spiral; capsule with two cells.

Species.

167. CHIRO'NIA CENTAU'RIMUM. . . . V.S. 1.
Common Centaury.

SP. CH. Blossoms with five segments, funnel-shaped; stem forked; leaves spear-shaped. *Woodville*, 157. *With.* 252. *E. B.* 417. *Abbot*, 161. *Robson*, 79.

Pastures and barren dry fields. July. Common. A.

OBS.

This is a neat, simple, and elegant little plant; the whole of it is extremely bitter. It is the basis of the famous Portland Powder. A Tincture of the leaves and the root is a good medicine for weak stomachs.

ORDER II.

DIGYNIA. Two pointals.

Genus 1.

CHENOPO'DIUM. Goosefoot.

NAT. ORD. *Holeraceæ*.

GEN. CH. Calyx with five leaves, pentagonal; blossom none; seed one, round but flatted, superior, covered by the closing calyx.

Species.

168. CHENOPO'DIUM BONUS HENRI'CUS . V. S. 1.
Perennial Goosefoot. Mercury Goosefoot.
Wild Spinage. Good King Henry.

SP. CH. Leaves triangular, arrow-shaped, very entire; spikes compound, leafless, axillary. *With.*
265. *E. B.* 1033. *Park.* 1225-6.

Dunghills, farm-yards, church-yards. June. Common. P.

OBS.

Cultivated as spinage by the poor people of Boston in Lincolnshire. The leaves are often boiled in broth. The roots are given to sheep that have a cough. Withering.

169. CHENOPO'DIUM HY'BRIDUM . . . V. S. 2.
Thorn-apple-leaved Goosefoot. Maple-leaved Goosefoot.

SP. CH. Leaves heart-shaped, with angles tapering

to a point; bunches branching, leafless. *With.*
 267. *E. B.* 1919. *Abbot*, 190. *Robson*, 229.

Rubbish, kitchen gardens. August. Common. A.

170. CHENOPODI'UM RU'BRUM V.S. 3.
 Red Goosefoot. Sowbane.

SP. CH. Leaves heart-triangular, rather blunt, and
 toothed; bunches upright, compound, somewhat
 leafy, shorter than the stem. *With.* 266. *E. B.*
 1721. *Abbot*, 186. *Robson*, 228.

Dunghills; road sides. August. Not very rare. A.

171. CHENOPO'DIUM AL'BUM V.S. 4.
 White Goosefoot.

SP. CH. Leaves diamond, triangular, gnawed, entire
 behind; the uppermost oblong; bunches upright.
With. 267. *E. B.* 1723. *Abbot*, 189. *Rob-*
son, 229.

Cornfields, dunghills, and gardens. August. Com-
 mon. A.

172. CHENOPO'DIUM UR'BICUM V.S. 5.
 Upright Goosefoot.

SP. CH. Leaves triangular, somewhat toothed;
 bunches crowded, quite straight, laid close to the
 stem, very long. *With.* 266. *E. B.* 717. *Rob-*
son, 228.

Dunghills, and amongst rubbish. August. Not
 rare. A.

OBS.

The principal specific distinction between this and the C. rubrum is in the bunches; and the ripe seeds of the latter being at least five times less than those of the C. urbicum; the leaves of the urbicum are widely and deeply notched, and the calyx is smaller than in the rubrum.

Genus 2.

UL'MUS. Elm.

NAT. ORD. Scabridæ.

GEN. CH. Cup 5-cleft; blossom none; berry dry, flattened, skinny.

Species:

173. UL'MUS CAMPESTRIS V. S. 1.
Common Elm.

SP. CH. Leaves doubly serrated, unequal at the base; flowers nearly sitting, in clusters. *With.* 274.
E. B. 1886. *Abbot*, 191. *Robson*, 214.
Woodville, 197.

Hedges. April. Very common. T.

OBS.

The inner tough bark of the elm, has been found very efficacious in cutaneous complaints. See Woodville.

174. UL'MUS MONTANA V. S. 2.
Broad-leaved Elm. Wych-hazel Elm.

SP. CH. Leaves doubly serrated, unequal at the base; egg-shaped; but taper-pointed, smooth; flowers scattered on long fruit-stalks. *With.* 275.

E. B. 1887. *Syn. U. effusa.* *Abbot*, 192.

Hedges. April. Rare. T.

Wixford lane.

OBS.

Silk worms will feed upon the leaves.

Genus 3.

GENTIA'NA. Gentian.

NAT. ORD. Rotaceæ.

GEN. CH. Blossom 1 petal; cup 2 valves; 1 cell, with 2 longitudinal receptacles.

Species.

175. GENTIA'NA AMAREL'LA V. S. 1.
Autumnal Gentian. *E. B.* Fellwort Gentian.
Abbot.

SP. CH. Blossom 5-cleft, salver-shaped; mouth bearded, segments of the cup equal. *With.* 276.
E. B. 236. *Abbot*, 193. *Robson*, 79.

Dry pastures. July. Rare. A.

Cleve Hills, Worcestershire. Broadway Hills, Gloucestershire, and Alne Hills, Warwickshire.

Genus 4.

CUS'CUTA. Dodder.

NAT. ORD. Vagæ.

GEN. CH. Calyx with 4 or 5 clefts; blossom 1 petal;
capsule with 2 cells, cut round; seeds in pairs.

Species.

176. CUS'CUTA EUROPÆ'A V. S. 1.
Greater Dodder.

SP. CH. Flowers nearly sitting, blossom without
scales; stigma simple. *Abbot*, 125. *E. B.* 378.
Parkinson, 10. 2. *Robson*, 69.

On hops, nettles, beans, &c. July. Rare. A.
Badsey, South Littleton, Worcestershire.

OBS.

Climbs in a spiral direction, from right to left.

Genus 5.

DAU'CUS. Carrot.

NAT. ORD. Umbellatæ.

* With an universal and partial Involucrum.

GEN. CH. Blossoms nearly radiate, all with both
stamens and pointals; fruit rough with hair.
Fences doubly winged.

Species.

177. DAU' CUS CARO' TA V. S. 1.

Wild Carrot. Birds-nest.

SP. CH. Angles of the seeds 4, distant, hispid; leaf stalks ribbed underneath; umbel concave when in seed. *With.* 285. *Abbot*, 203. *Robson*, 206. *Woodville*, 161. *E. B.* 1174.

Pastures. July. Common. B.

OBS.

The seeds have been sometimes used as diuretics and carminatives; and are highly recommended in calculous complaints. Carrots are a grateful and nutritious food for all kinds of cattle, and well worthy of a more general cultivation for the purpose of the farmer. Carriage horses will work upon them nearly as well as upon oats, but if given beyond a certain period, the cattle are apt to make bloody urine. A poultice made of the roots has been found to mitigate the pain, and abate the stench of foul and cancerous ulcers. Withering.

Genus 6.

BU' NIUM. Earth-nut.

NAT. ORD. Umbellatæ.

GEN. CH. Blossom uniform; umbel crowded; fruit ovate

Species.

178. BU'NIUM FLEXUO'SUM V.S. 1.

Small Earth-nut. Pig-nut.

SP. CH. Stem tapering at bottom, zigzag. *With.*

287. *E. B.* 988. *Park.* 893. *Abbot,* 204.

Robson, 207.

Meadows, pastures, orchards and woods. May,

June. Common. P.

OBS.

Roots tuberous; eaten either raw, boiled, or roasted, they are very little inferior to chesnuts. Leaves doubly winged, segments very fine and slender.

Genus 7.

CO'NIUM. Hemlock.

NAT. ORD. Umbellatæ.

GEN. CH. Partial fences going half-way round, generally of 3 leaves, fruit nearly globular, with 5 scores.

Species.

179. CO'NIUM MACULA'TUM V.S. 1.

Common Hemlock.

SP. CH. Seeds scored, stem greatly branched, smooth, spotted. *With.* 287. *E. B.* 1191.

Woodville, 22. *Abbot,* 205. *Robson,* 207.

Hedges, orchards, cultivated ground and dunghills.
June. Common. B.

OBS.

Every part of this plant is deservedly in great estimation as a medicine.

Genus 8.

HERACLE'UM. Cow-parsnip.

NAT. ORD. Umbellatæ.

GEN. CH. Fruit compressed, leaf-like, smooth, encompassed by a narrow membranaceous border; blossom irregular; petals bent inwards, notched at the end.

Species.

180. HERACLE'UM SPHONDYL'IUM . . V. S. 1.
Common Cow-parsnip or Hogweed.

SP. CH. Leaves doubly-winged, even; flowers radiated. *With.* 291. *E. B.* 939. *Abbot*, 207.
Robson, 204. *Park.* 953.

Meadows and hedges. July. Common. B.

OBS.

The universal involucre is often wanting; the partial involucre between strap and spear-shaped going half way round.

181. HERACLE'UM ANGUSTIFO'LIIUM . . V. S. 2.
Narrow-leaved Cow-parsnip.

SP. CH. Leaves with a cross in the wing, leaflets spear-shaped; blossoms with florets. *Abbot*, 208.

With. 291. *Var.* 2. *Park.* 954. 2.

Hedges. July. Rare. B.

OBS.

Dr. Withering puts this down as a variety of the preceding species. I have met with it several times; it is smaller in all its parts than the H. sphondylium, but whether these are sufficient specific distinctions, must be left to the determination of my seniors in Botany.

Genus 9.

SI'UM. Water-parsnip. Skerret.

NAT. ORD. Umbellatæ.

GEN. CH. Fruit rather egg-shaped, scored; involu-
crum of many leaves; petals heart-shaped.

Species.

182. SI'UM NODIFLO'RUM V. S. 1.

Trailing Water-parsnip.

SP. CH. Leaves winged; leaflets tooth-serrated; umbels lateral, opposite the leaves, sitting or on fruit-stalks; stem trailing. *With.* 295. *E. B.*

639. *Woodville*, 182. *Abbot*, 212. *Robson*, 208.

Rivulets and wet ditches. July. Common. P.

183. SI'UM ANGUSTIFO'LIUM V. S. 2.
Narrow-leaved Water-parsnip.

SP. CH. Leaves winged; leaflets irregularly jagged and serrated; involucrum wing-cleft, umbels on fruit-stalks axillary. *With.* 294. *E. B.* 139. *Abbot*, 211. *Robson*, 208.

Rivulets, ditches, and ponds. July. Rare. P.
Near Washford Bridge.

OBS.

Leaves of the general and partial involucrum very large and conspicuous, often deeply serrated or wing-cleft.

Genus 10.

ANGE'LICA. Angelica.

NAT. ORD. Umbellatæ.

GEN. CH. Fruit nearly round, angular, firm, with reflected styles; blossoms equal; petals bent in.

Species.

184. ANGE'LICA SYLVES'TRIS V. S. 1.
Wild Angelica.

SP. CH. Leaflets equal, egg-spear-shaped, serrated. *With.* 293. *E. B.* 1128. *Woodville*, 265. *Abbot*, 209. *Robson*, 209.

Marshy woods and wet hedges. July. Common.
B.

OBS.

A tall noble looking plant, 8 to 10 feet high, with a remarkable smooth stem, of a purplish colour, covered with a whitish down, which easily rubs off. It is warm, acrid, bitter, and aromatic, but the species cultivated in our gardens (A. Archangelica) possesses these properties in a higher degree. Withering.

Genus 11.

CAU'CALIS. Hensfoot.

NAT. ORD. Umbellatæ.

GEN. CH. Blossoms with a ray, those in the centre with only stamens; petals nicked and bent inwards; fruit rough with bristles; fences entire.

Species.

185. CAU'CALIS ANTHRIS'CUS . . . V.S. 1.
Hedge Hensfoot.

SP. CH. Fences with many divisions; little umbels crowded; seeds egg-shaped; styles reflected; leaves doubly compound; the terminating leaflet strap-spear-shaped, gradually narrowing to a point. *With.* 283. *E. B.* 987. *Park.* 921. 9. *Abbot*, 201. *Syn. Tordylium Anthriscus. Robson*, 206.

Hedgesides. July. Common. A.

186. CAU'CALIS NODO'SA V. S. 2.

Knotted Caulis or Hensfoot

SP. CH. Umbels lateral, simple, sitting ; seeds egg-shaped, outer ones set with bristles, inner ones rough. *With.* 284. *E. B.* 199. *Abbot*, 202. *Syn. Tordylium Nodosum.* *Robson*, 206.

Road sides, walls, borders of cornfields. June. Rare. A.

Spechley and Badsey, Worcestershire. On a wall at Walcot, Warwickshire.

OBS.

Leaves finely divided; inner seeds rough with wart-like points, somewhat resembling shagreen.

187. CAU'CALIS DAUCOI'DES V. S. 3.

Fine-leaved Hensfoot. Small Caulis.

SP. CH. Umbels in threes, leafless, small umbels with 3 seeds and 3 leaves ; leaves smooth above, hairy on the ribs underneath. *With*, 282. *E. B.* 197. *Abbot*, 198. *Park.* 920. 6.

Cornfields. June. Rare. A.

Alne Hills in cornfields. *Rufford.* In fields about Drayton bushes.

OBS.

Leaves extremely elegant, very finely divided,

which with its pink coloured florets makes it the queen of the Caucalis tribe.

188. CAU'CALIS ARVEN' SIS V. S. 4.
Corn Hensfoot.

SP. CH. Involucrum of 1 leaf, or none; seeds egg-shaped; leaves doubly compound, terminating leaflet strap-spear-shaped; stem much branched.
With. 283. *Abbot*, 200. *Robson*, 205.

Cornfields. July. Common. A.

DES.

The leaves very much resemble those of the C. Anthriscus, but there is sufficient specific difference. This generally grows in cornfields, and is never found in hedges.

189. CAU'CALIS SCANDI' CINA V. S. 5.
Hemlock Scandix. Small Hemlock chervil, with rough seeds. *Robson*.

SP. CH. Seeds egg-shaped, but tapering to a point, with short hooked prickles on the back. *With.* 284. *Syn. Scandix Anthriscus. E. B.* 818. *Abbot*, 223. *Robson*, 210.

Road sides, and amongst rubbish. June. Rare. A.
At the foot of the wall at Oversley Bridge.

Genus 12.

BUPLEU' RUM. Thorowax,

NAT. ORD. Umbellatæ.

GEN. CH. Partial fence the largest, of 5 leaves; petals rolled in; fruit roundish, flatted, scored.

Species.

190. BUPLEU'RUM ROTUNDIFO'LIIUM . . V.S. 1.

Common Thorowax.

SP. CH. Universal involucrum none; leaves perforated by the stem. *With.* 280. *E. B.* 99. *Park.* 580-1. *Abbot*, 197. *Robson*, 207.

Cornfields. June. Not very rare. A.

Bidford, Haslor, Grafton, Warwickshire. Badsey, Bretforton, Worcestershire.

Genus 13.

SANI'CULA. Sanicle.

NAT. ORD. Umbellatæ.

GEN. CH. Umbels crowded, almost in heads; fruit rough; fruit of the disk abortive.

191. SANI'CULA EUROPÆ'A . . . V.S. 1.

Common Sanicle. Wood Sanicle.

SP. CH. Root leaves simple; florets all sitting. *With.* 279. *E. B.* 98. *Abbot*, 196. *Robson*, 204.

Woods and thickets. May. Common. P.

OBS.

A foot or more in height; root leaves 5-lobed,

segments jagged, paler green and shining underneath. The ancients thought this with Bugle of wonderful virtues; the leaves are slightly bitter, aromatic and astringent. "I do not regard this, and the *Hydrocotyle*, as true umbelliferous plants, but as a sort of connecting link between the *As-trantia* in the order *Umbelliferae*, and *Panax*, and *Aralia*, in the *Hederaceae*. Withering.

Genus 14.

OENANTHE. Dropwort.

NAT. ORD. Umbellatae.

GEN. CH. Florets dissimilar, those in the centre sitting, barren; fruit crowned with the cup and pointals which are permanent.

Species.

192. OENANTHE FISTULOSA . . . V. S. 1.
Water Dropwort.

SP. CH. Root sending forth suckers; stem leaves winged, thread-shaped, hollow. *With.* 297.
E. B. 363. *Abbot*, 217. *Park*, 1233. 1. *Rob-son*, 204.

Marshy and boggy ground. June. Common. P.

193. OENANTHE PIMPINELLOIDES . . . V. S. 2.
Parsley Dropwort.

SP. CH. Leaflets of the root leaves wedge-shaped, cloven, those of the stem entire, strap-shaped;

very long, undivided. *With.* 298. *E. B.* 347.
Salt marshes, ponds and wet ditches. August.
Rare. P.

In a ditch with the *scirpus maritimus*, at Badsey.

OBS.

The knobs of the root are fusiform, or spindle-shaped.

194. OENAN'THE PEUCEDANIFO'LIA . . . V.S. 3.
Sulphurwort-leaved Dropwort.

SP. CH. All the leaves strap-shaped; root leaves with a double row of wings; stem leaves winged, no general fence; knobs of the root ovate, sitting. *E. B.* 348. *Abbot*, 218. *Syn. O. fistulosa*. *Var. 2.* *With.* 297. *Park.* 1233. 2.

Marshes, ponds, and wet ditches. August. Not rare. P.

Great Alne, Grafton, Bidford.

Genus 15.

PEUCE'DANUM. Sulphurwort.

NAT. ORD. Umbellatæ.

GEN. CH. Involucrum very short; fruit elliptical slightly ridged, compressed and bordered.

Species.

195. PEUCE'DANUM SILAU'S : . . . V.S. 1.

Meadow Saxifrage, or Sulphurwort.

SP. CH. Leaves wing-cleft, segments opposite; general fence of 2 leaves. *With.* 290. *E. B.* 214 2. *Abbot*, 206. *Robson*, 207.

Moist meadows and pastures. July. Common. P.

Genus 16.

SI'SON. Honewort.

NAT. ORD. Umbellatæ.

GEN. CH. Fruit egg-shaped, scored; fence of generally 4 leaves.

Species.

196. SI'SON AMO'MUM V. S. 1.
Hedge Honewort.

SP. CH. Leaves winged; umbels upright. *With.* 295. *E. B.* 954. *Park.* 914. 1. *Abbot*, 214. *Robson*, 209.

Moist woods and hedges. August. Common. P.

197. SI'SON SE'GETUM V. S. 2.
Corn Honewort.

SP. CH. Leaves winged; umbels nodding. *With.* 296. *E. B.* 228. *Robson*, 209. *Abbot*, 215. *Park.* 932.

Cornfields and hedge banks, in a chalky or clay soil. July, August. Very rare. B.

On a ditch bank supported by the hedge, between Hanbury and Droitwich.—Badsey, Worcestershire.

OBS.

All the leaves with numerous pairs of little leaves; it is very elegant in its structure.

198. SI'SON INUNDA'TUM V. S. 3.
Water Honewort. Least Water Parsnip, Floating White Rot.

SP. CH. Creeping, leaves under water hair-like, those above winged; umbels of 2 spokes. *With.* 296. *Abbot*, 216. *Robson*, 209. *Syn. Hydroco'tyle inundata*, *E. B.* 227.

In ditches, pools, and grounds subject to be overflowed. Bogs. June. Rare. A.

In some springy boggy ground on Abberley Hills, Worcestershire, above the Hundred-house.

OBS.

This is supposed to be the smallest of the umbelliferous plants.

Genus 17.

HYDROCO' TYLE. Pennywort.

NAT. ORD. Umbellatæ.

GEN. CH. Umbel simple, on a foot-stalk; involu-

crum of 2, 3, or 4 leaves; petals entire; seeds semicircular, flattened.

Species.

199. HYDROCO'TYLE VUL'GARIS . . . V. S. 1.
Marsh Pennywort. White Rot.

SP. CH. Leaves target-shaped, notched; umbels with 5 flowers. *With.* 279. *E. B.* 751. *Park.* 1214. *Abbot,* 195. *Robson,* 203.

Marshy grounds, bogs. Rare. P.

Feckenham Bog, Astwood Common, Worcestershire. Haslor field, near Hoo-mill, Warwickshire.

** With only one partial involucre.

Genus 18.

SCAN'DIX, Shepherd's Needle.

NAT. ORD. Umbellatæ.

GEN. CH. Blossom radiate, fruit awl-shaped; petals nicked; florets of the centre with stamens only.

Species.

200. SCAN'DIX ODORA'TA . . . V. S. 1.
Sweet Chervil. Sweet Cicely, &c.

SP. CH. Seeds furrowed, angular. *With.* 302. *E. B.* 697. *Robson,* 210. *Park.* 935. 1.

Orchards and waste places, but always near houses. June. Rare. A.

At Studley Castle. Balsall Temple.

OBS.

The seeds are used in the North of England, for polishing and perfuming oak floors and furniture. Withering.

201. SCAN' DIX PEC' TEN V. S. 2.

Common Shepherd's Needle.

SP. CH. Seeds with a very long beak; leaflets with many fine divisions. *With.* 302. *E. B.* 1397.

Park. 916.1. *Abbot,* 222. *Robson,* 210.

Cornfields. May. Very common. A.

Genus 19.

CHÆROPHYL' LUM. Wild Chervil.

NAT. ORD. Umbellatæ.

GEN. CH. Fence bent back, concave; petals heart-shaped, bent in; fruit oblong, smooth.

Species.

202. CHÆROPHYL' LUM SYLVES' TRE . . . V. S. 1.

Common Chervil. Wild Cicely.

SP. CH. Stem smoothish, scored, a little swollen at the knots. *With.* 303. *E. B.* 752. *Abbot,*

225. *Robson,* 210.

Hedges, orchards, and pastures. May, June. Common. P.

203. CHÆROPHYL'LUM TEMULEN'TUM . V. S. 2.
Small Chervil. Wild Chervil.

SP. CH. Stem rough, spotted; joints swollen. *With.*

304. *E. B.* 1521. *Abbot*, 226. *Robson*, 210.

Under hedges. June. Common. B.

Genus 20.

ÆTHU'SA. Foolsparsley.

NAT. ORD. Umbellatæ.

GEN. CH. Fencelets going half round, with 3 leaves,
hanging down; fruit scored.

Species:

204. ÆTHU'SA CYNA'PIUM . . . V. S. 1.
Foolsparsley.

SP. CH. All the leaves alike, fruit nearly globular.

With. 300. *E. B.* 1192. *Abbot*, 221. *Robson*,
211.

Gardens and fields. July. Common. P.

OBS.

The leaves are finely divided, with a most beautiful glossy green.

Genus 21.

PHELLAN'DRIUM. Horsebane.

NAT. ORD. Umbellatæ.

GEN. CH. Central florets smallest, fruit egg-shaped,

smooth, crowned with the pointals and the calyx.

Species.

205. PHELLAN'DRIUM AQUAT'ICUM . . V. S. 1.
Water Horsebane.

SP. CH. Ramifications of the leaves straddling.
With. 298. *E. B.* 684. *Woodville*, 266. *Abbot*, 219. *Robson*, 211.

Rivers, ditches, and pools. July. Rare. P.

Near Worcester. *Rufford*. In an old gravel pit full of water at Eden-way, Warwickshire.

*** Without any involucre.

Genus 22.

PASTINA'CA. Parsnip.

NAT. ORD. Umbellatæ.

GEN. CH. Fruit elliptical, compressed, flat; petals rolled in, entire.

Species.

206. PASTINA'CA SYLVES'TRIS . . . V. S. 1.
Common wild Parsnip.

SP. CH. Leaves simply winged, downy underneath.
With. 304. *E. B.* 556. *Abbot*, 227. *Robson*, 211.

Borders of ploughed fields, Road sides. July.
Common. B.

OBS.

The roots are highly nutritious. Hogs are fond of them and quickly grow fat when fed with them. In the North of England they are brewed and an agreeable liquor is obtained.

Genus 23.

PIMPINEL' LA. Burnet Saxifrage.

NAT. ORD. Umbellatæ.

GEN. CH. Fruit egg-oblong; petals bent in, stigma nearly globular.

Species.

207. PIMPINEL' LA SAXIF' RAGA . . . V. S. 1.
Common Burnet Saxifrage.

SP. CH. Leaves winged, root leaves nearly round, upper ones strap-shaped. *With.* 307. *Woodville*, 178. *E. B.* 407. *Abbot*, 231. *Robson*, 212.

Dry meadows and pastures. July. Common. P.

208. PIMPINEL' LA MAG' NA . . . V. S. 2.
Great Burnet Saxifrage.

SP. CH. Leaves uniform, winged; leaflets heart-shaped, irregularly serrated, the odd one divided into 3 lobes. *With.* 308. *E. B.* 408. *Abbot*, 233. *Robson*, 212.

Woods and hedges in a calcareous soil. August.
Rare. P.

On the side of the road between Droitwich and Ombersley, close to Sir John Packington's Park Wall, Worcestershire.

Genus 24.

A'PIUM. Smallage.

NAT. ORD. Umbellatæ.

GEN. CH. Fruit egg-shaped, bulging, scored. Fence of 1 leaf; petals equal.

Species.

209. A'PIUM GRAVE'OLENS V. S. 1.
Smallage. Wild Celery.

SP. CH. Stem leaves wedge-shaped. *With.* 309.
E. B. 1210. *Park.* 926. 1. *Abbot,* 234. *Rob-*
son, 212.

Salt marshes and ditches. June. Rare. P.

OBS.

On the canal beyond Droitwich. In a ditch at Upton Snodsbury. The water is saltish about Church Hill, and Upton Snodsbury, and contains a small portion of the sulphate of magnesia. When cultivated, it loses its noxious properties; and the root and stem blanched by covering them up with earth are eaten raw, boiled in soups, or stewed; in this latter state it is called celery. It is also to be found at Bretforton, near Badsey, Worcester-shire.

Genus 25.

AEGOPO'DIUM. Goutweed.

NAT. ORD. Umbellatæ.

GEN. CH. Fruit egg-oblong, scored, tapering at each end.

Species.

210. AEGOPO'DIUM PODAGRA'RIA . . V.S. 1.
Herb Gerard. Goutweed. Ashweed. Ground
Ash.

SP. CH. Upper leaves 3 together, lower ones in
triple threes. *With.* 310. *E. B.* 940. *Park.*
943. 1. *Abbot*, 235. *Robson*, 212.

Woods, hedges and gardens. June. Common. P.

OBS.

Leaves, triplicato-ternatum, or trebly 3-leaved; each leaflet is spear-egg-shaped, serrated. A very common weed in gardens, and often very troublesome to be eradicated; but the leaves may be eaten early in the spring with other pot herbs.

Genus 26.

SMYR'NIUM. Alexanders.

NAT. ORD. Umbellatæ.

GEN. CH. Petals keeled, pointed; fruit egg-globular; angular with ribs.

Species.

211. SMYR'NIUM OLUSA'TRUM . . . V. S. 1.
Common Alexanders. Alissanders.

SP. CH. Stem leaves growing by threes, on leaf-stalks, serrated. *With.* 305. *E. B.* 230. *Park.* 930. 1. *Abbot*, 228. *Robson*, 212.

Ditches and rocks on the sea coast. *Withering.*

Under moist hedges. Rare. May, June. B.

In ditches about Badsey near Evesham, Worcestershire.

OBS.

It was formerly cultivated in our gardens, but its place is now better supplied by celery; it is reported to be as excellent an anti-scorbutic.

ORDER III.

TRIGYNIA. Three pointals.

Genus 1.

VIBUR'NUM. Mealy-tree.

NAT. ORD. Dumosæ.

GEN. CH. Cup 5 segments, superior; blossom 5 clefts; berry 1 seed.

Species.

212. VIBUR'NUM LANTA'NA . . . V. S. 1.
Pliant mealy-tree. Way-faring-tree.

SP. CH. Leaves heart-shaped, serrated, veined, cottony underneath. *With.* 310. *E. B.* 331. *Park.* 1448. *Abbot*, 236. *Robson*, 58.

Woods, hedges, in a calcareous soil. May. Common. S.

OBS.

The bark of the root is used to make bird-lime. The berries are drying and astringent. Withering.

213. VIBUR'NUM O'PULUS V. S. 2.

Guelder Rose mealy-tree. Marsh Elder.

SP. CH. Leaves lobed; leaf-stalks set with glands. *With.* 310. *E. B.* 332. *Park.* 209. 5. *Abbot*, 237. *Robson*, 58.

Woods, wet hedges and marshy places. June. Not rare. S.

OBS.

The guelder rose is a variety, in which the whole of the cyme or tuft consists of abortive florets, and instead of being flat like the marsh-elder, it is contracted into a globular form. That beautiful evergreen, the ornament of every shrubbery (the laurustinus), is of the viburnum family.

Genus 2

SAMBU'CUS. Elder.

NAT. ORD. Dumosæ.

GEN. CH. Calyx with 5 segments; blossom 5 divisions; berry juicy; 3 seeds.

Species.

214. SAMBU'CUS NI'GRA V. S. 1.
Common Elder.

SP. CH. Tufts or cymes with five divisions; leaves winged; leaflets nearly egg-shaped, serrated; stem tree-like. *With.* 311. *Woodville*, 78. *E. B.* 476. *Abbot*, 239. *Robson*, 59.

Var. 3. laciniata. *With. & Park.* 208. 3. Leaflets jagged. Parsley-leaved Elder.

The common Elder in woods and hedges. May.
Common. S. The parsley-leaved variety.
Rare. At Wixford.

215. SAMBU'CUS E'BULUS V. S. 2.
Dwarf Elder.

SP. CH. Cymes with three divisions; stipulæ or leaf props, leaf-like; stem herbaceous. *With.* 311. *Woodville*, 260. *E. B.* 475. *Robson*, 58. *Abbot*, 238.

Hedges and road sides. July. Very rare. S.

Near Grafton church on the side of the road.

OBS.

It possesses considerable medicinal properties. The berries give out a violet colour. The green leaves drive away mice from granaries, and the

Silesians strew them where their pigs lie, under a persuasion that they prevent some of the diseases to which they are liable. No animal will eat it. Withering.

ORDER IV.

TETRAGYNIA. Four pointals.

Genus 1.

PARNA'SSIA. Grass of Parnassus.

NAT. ORD. Vagæ. Linn.

GEN. CH. Calyx 5-cleft; petals 5. Nectaries 5, heart-shaped, fringed, points globular; capsule 4 valves, with 1 cell; seeds with a membranaceous border.

Species.

216. PARNA'SSIA PALUS'TRIS . . . V.S. 1.
Marsh Parnassia.

SP. CH. Nectaries or honey-cups simple. *With.*
314. *Abbot*, 241. *E. B.* 82. *Robson*, 104.

Bogs and marshy ground. July. Rare. P.

Bromsgrove Lickey; Worcestershire. Coleshill
Bog and Knowle, Warwickshire. Canton Rough,
Bridgenorth, Shropshire. *Hall*.

ORDER V.

PENTAGYNIA. Five pointals.

Genus 1.

LI'NUM. Flax.

NAT. ORD. Gruinales.

GEN. CH. Cup with 5 leaves; petals 5; cupsule, 5 valves, 10 cells; seeds solitary.

Species.

217. LI'NUM CATHAR'TICUM V. S. 1.
Purging Flax.

SP. CH. Leaves opposite, egg-spear-shaped; stem forked, blossoms pointed. *With.* 317. *E. B.* 382. *Park.* 1336. 10. *Abbot,* 243. *Robson,* 108.

Dry meadows and pastures. June. Common. A.

218. LI'NUM USITATIS'SIMUM V. S. 2.
Common Flax.

SP. CH. Cups and capsules pointed; petals slightly notched; leaves lance-shaped, alternate; stem nearly single. *Woodville,* 3. *With.* 316. *E. B.* 1357. *Abbot,* 242. *Robson,* 108.

Cornfields. July. Rare. A.

Broome, Warwickshire. Astwood, Worcester-shire.

OBS.

The L. catharticum; an infusion of the dried plant is an excellent purge, and has been given

with advantage in many obstinate rheumatisms. It frequently acts as a diuretic. Horses, sheep, and goats, eat it. "The *L. usitatissimum* is a very valuable plant, it originally came from Egypt; the seeds yield by expression only, a large proportion of oil, which is an excellent pectoral; after the oil is expressed, the remaining farinaceous part, called oil cake, is given to oxen, who soon grow fat upon it. It is used by the painters and the varnishers. The fibres of the stem are manufactured into linen, and this linen, when worn to rags, is made into paper." Withering.

219. LI'NUM RADI'OLA V. S. 3.

All-seed Flax. Least Rupture-wort.

SP. CH. Leaves opposite; stem forked; stamens 4; pointals 4. *With.* 318. *Robson*, 108. *Syn. Radiola millegrana.* *E. B.* 893.

Moist heaths. August. Rare. A.

Astwood Heath, Worcestershire. Coleshill Pool, Warwickshire.

OBS.

This certainly belongs to order 4th. of the Class *Tetrandria*.*

Genus 2.

DRO'SERA. Sundew.

NAT. ORD. Gruinales.

* See note 1.

GEN. CH. Cup 5-clefts; petals 5; capsule 1 cell, opening with 5 valves; seeds many.

Species.

220. DRO'SERA ROTUNDIFO'LIA . . . V. S. 1.
Round-leaved Sundew.

SP. CH. Stems from the root, leaves round. *With.*
318. *E. B.* 867. *Park.* 1052. 1. *Abbot*, 244.
Robson, 105.

Bogs. July. Common. P.

Bogs on Bromsgrove Lickey. West-side of Malvern Hill, Worcestershire. Coleshill Bog and Pool, Warwickshire.

OBS.

The whole plant is acrid, and sufficiently caustic to erode the skin; but judiciously managed the juice may be mixed with milk, so as to make an innocent and safe cosmetic. The juice itself will destroy warts and corns. This plant is supposed to occasion the rot in sheep, with others, as the Pinguicula, Hydrocotyle, &c. See Sp. 18. and 199.

ORDER XIV.

POLYGYNIA. Many pointals.

Genus 1.

MYOSU'RUS. Mousetail.

NAT. ORD. *Aggregatæ*.

GEN. CH. Cup with five leaves, united at the base, with a spur behind, deciduous; nectaries 5, like petals, awl-shaped; seeds numerous.

Species.

221. MYOSU'RUS MIN'IMUS V. S. 1.
Least Mousetail.

SP. CH. ——— *Abbot*, 247. *With.* 321. *E. B.*
435. *Park.* 500. 6. *Robson*, 199.

Cornfields, meadows and pastures in a gravelly soil.
May and June. Rare. A.

Alne Hills, and at Studley in a field by the church.

OBS.

The whole plant is acrid.

CLASS VI.

HEXANDRIA. Six stamens.

ORDER I.

MONOGYNIA. One pointal.

Genus 1.

NARCIS'SUS. Daffodil.

NAT. ORD. Spathaceæ.

OBS.

“ *Linnaeus* has divided the liliaceous tribe of plants, in his natural orders, into the *Ensatae*, the *Spathaceæ*, and the *Coronariæ*. Some also of the *Sarmentaceæ* belong to this tribe.” See Genus *Convallaria*.

GEN. CH. Petals 6, equal; nectary or honey-cup bell-shaped, of 1 leaf; stamens within the honey-cup.

Species.

222. NARCIS'SUS PSEUDO-NARCISSUS . . V. S. 1.
Common Daffodil.

SP. CH. Sheath with 1 flower; nectary bell-shaped, upright, curled; as long as the petals; petals egg-shaped. *With.* 325. *E. B.* 17. *Abbot*, 249. *Robson*, 144.

Woods, meadows, pastures. May. Not very rare.
P.

Studley and Sambourne in great plenty.

Genus 2.

AL'L IUM. Garlick.

NAT. ORD. Spathaceæ.

GEN. CH. Blossom 6 divisions, expanding; sheath of many flowers; umbel crowded; capsule superior.

Species.

223. AL'LIIUM VINEA'LE V. S. 1.

Crow Garlick.

SP. CH. Stem with cylindrical leaves and bulbs; filaments with 3 points. *With.* 327. *E. B.* 1974. *Abbot*, 250. *Robson*, 141.

Meadows and pastures. June. Not rare. P.

OBS.

The young shoots are eaten in salads, or boiled as a pot-herb.

224. AL'LIIUM OLERA'CEUM V. S. 2.

Wild Garlick.

SP. CH. Filaments undivided; leaves semi-cylindrical, furrowed underneath. *With*, 327. *E. B.* 488. *Robson*, 141.

Meadows, pastures, and amongst corn. July. Rare. P.

In a field by Rosall.

225. AL'LIIUM URSI'NUM V. S. 3.

Ramson Garlick. Broad-leaved Garlick.

SP. CH. Stalk naked, 3-square; leaves spear-shaped, on leaf-stalks; umbel flat at the top. *With.* 328. *E. B.* 122. *Abbot*, 251. *Robson*, 142.

Woods and moist hedges. May. Rare. P.

Spernall and Oversley Woods. On moist ditch

banks at Hay House, Castle Bromwich, in great plenty.

OBS.

An infusion in brandy is esteemed a good remedy for the gravel. Other plants growing near it do not flourish. Cows eat it; but it communicates its flavour to the milk and butter, so as to make it very disagreeable to many people in the spring. Withering.

Genus 3.

GALAN'THUS. Snow-drop.

NAT. ORD. Spathaceæ.

GEN. CH. Petals 3, concave; honey-cup of 3 small petals, nicked at the end; summit or stigma simple.

Species.

226. GALAN'THUS NIVA'LIS 1.
Common Snow-drop.

SP. CH. ———— *With.* 324. *E. B.* 19. *Abbot*, 248.

Bottom of mountains, sides of hedges. February, March. Very rare. P.

On the side of the Ridgeway.

Genus 4.

HYACIN'THUS. Hyacinth.

NAT. ORD. Coronariæ.

GEN. CH. Blossom bell-shaped, permanent; segments rolled back; 3 honey-cup pores at the point of the germ.

Species.

227. HYACIN'THUS NON-SCRIP'TUS . . . V. S. 1.
Hare-bells. English Hyacinth.

SP. CH. Blossom tubular, bell-shaped, with 6 divisions, segments rolled back; floral leaves in pairs.
With. 336. *Abbot*, 252. . *Syn.* *Scilla nutans*.
E. B. 377.

Woods and hedges. May. Common. P.

Obs.

“The fresh roots are poisonous. They may be converted into starch.” *Withering*.

Genus 5.

TU'LIPA. Tulip.

NAT. ORD. Coronariæ.

GEN. CH. Blossom of 6 petals, bell-shaped, inferior; style none; stigma triangular, sitting close to a long prismatic germ.

Species.

228. TU'LIPA SYLVES'TRIS 1.
Wild Tulip.

SP. CH. Flowers solitary, rather drooping; leaves

spear-shaped; stamens hairy above the base.

With. 329. *E. B.* 63. *Abbot*, 253.

Old chalk-pits. April. Rare. P.

Allesley. *Bree*.

Genus 6.

NARTHE'CIUM. Asphodel.

NAT. ORD. Coronariæ.

GEN. CH. Blossom 6 petals; expanding, permanent; style-none, capsule egg-shaped; seeds with tail-like appendages at each end.

Species.

229. NARTHE'CIUM OSSIF'RAGUM . . . V. S. 1
Lancashire Asphodel.

SP. CH. Leaves sword-shaped, threads woolly.

With. 332. *E. B.* 535. *Syn.* *Anthericum*.

Abbot, 259. *Robson*, 143.

Bogs. July. Rare. P.

Near Rubry Hill on the Lickey, Worcestershire.
Coleshill Bog, Warwickshire.

OBS.

The leaves are sometimes long and grass-like, scored with prominent ribs. It is a very elegant, sweet scented and beautiful plant. The filaments are covered with a thick wool of a bright saffron colour. Anthers scarlet. "It is believed in Sweden to be noxious to sheep. Cows and Horses eat

it. Sheep and swine refuse it." It has acquired the trivial name (*ossifragum*) from a supposition that the bones of all animals who feed upon it become brittle and readily break.

Genus 7.

ORNITHO' GALUM. Star of Bethlehem.

NAT. ORD. Coronariæ.

GEN. CH. Blossom of 6 petals, upright, continuing, expanding more than half-way; filaments alternate, broad at the base; capsule superior, with 3 cells.

Species.

230. ORNITHO' GALUM UMBELLA' TUM . . . 1.
Common Star of Bethlehem.

SP. CH. Flowers forming a corymbus or flat topped spike; outer fruit-stalks taller than the central ones. *With.* 330. *E. B.* 130. *Abbot*, 255. *Robson*, 140.

Woods, meadows, heaths. May. Rare. P.

Meadows near Warwick. *Bree*.

Genus 8.

LEUCO' JUM. Snowflake. Greater Snowdrop.

NAT. ORD. Spathaceæ.

GEN. CH. Blossom bell-shaped, with six divisions, thickest at the ends; stigma undivided.

Species.

231. LEUCO'JUM AESTI'VUM 1.
Summer Snowflake.

SP. CH. Sheath many flowered; style club-shaped.
With. 324. *E. B.* 621.

OBS.

This elegant plant which is full a foot in height, may be seen in most gardens, and I am informed from good authority, that it grows wild, by the side of the Avon, above Stratford.

Genus 9.

CONVALLA'RIA. Convally.

NAT. ORD. Sarmentaceæ.

GEN. CH. Blossom of 6 segments; berry 3 cells, superior; 2 seeds.

Species.

232. CONVALLA'RIA MAJA'LIS 1.
Lily of the Valley.

SP. CH. Stalk naked, semicylindrical, flowers spiked, nodding. *With.* 334. *E. B.* 1035. *Abbot*, 257. *Excellent.* *Robson*, 60.

Hay Woods. *Bree.*

Genus 10.

JUN'CUS. Rush.

NAT. ORD. Tripetaloideæ.

GEN. CH. Calyx or cup of 6 leaves; blossom none;
capsule with 1 cell.

Species.

233. JUN'CUS CONGLOMERA'TUS . . . V. S. 1.

Common round-headed or clustered Rush.

SP. CH. Straw naked, upright; head on one side;
fruit egg-shaped, blunt, 3 stamens in each floret.

With. 338. *E. B.* 835. *Abbot*, 262. *Robson*,
217.

Moist meadows and heaths. July. Common. P.

OBS.

“Used to make wicks for watch lights, and the
pith in toys.”

234. JUN'CUS EFFU'SUS : . . . V. S. 2.

Common soft Rush.

SP. CH. Straw naked, upright; panicle lateral,
loose; flowers egg-shaped, blunt, 3 stamens in
each. *With.* 338. *E. B.* 836. *Abbot*, 263.

Robson, 217.

Road sides in wet places. July. Common. P.

OBS.

*The loose panicle at once distinguishes this from
the preceding species. The pith is used for the
same purposes.*

235. JUN'CUS INFLEX'US V.S. 3.
Common hard Rush.

SP. CH. Straw stiff, naked, scored; somewhat crooked and membranaceous at the end; panicle lateral, spreading; flowers egg-shaped, but tapering to a point. *With.* 338. *Abbot*, 264. *Robson*, 217. *Syn. J. glaucus.* *E. B.* 665, and *Sibthorpe Fl. Oxon.*

Pastures and road sides. Common. July. P.

236. JUN'CUS SQUARRO'SUS V.S. 4.
Moss Rush. Goose Corn.

SP. CH. Straw rigid, naked, leaves like bristles; panicles terminating, leafless, clustered. *With.* 339. *E. B.* 933. *Abbot*, 265. *Robson*, 217.

Barren turfy bogs on heaths. July. Rare. P.

Bromsgrove Lickey, Worcestershire. Coleshill Heath, Warwickshire.

OBS.

The leaves of the calyx of a black gloss, the edges white and skinny.

237. JUN'CUS ARTICULA'TUS V.S. 5.
Jointed Rush.

SP. CH. Straw leafy, trailing; leaves flatted, jointed with knots, panicle compound. *With.* 340. *E. B.* 238. *Park.* 1270. 5. *Robson*, 217. *Syn. J. compressus.* *Abbot*, 266.

Wet places. July. Common. P.

238. JUN' CUS OBTUSIFLO' RUS V. S. 6.

White husked jointed Rush.

SP. CH. Husks white. E. B. 2144. Syn. With.

J. articulatus. Var. 5.

Wet boggy places. July. Not very rare. P.

OBS.

The preceding rush is now made a distinct species, and put down as such in the English Botany. I have not met with it very frequently. In some boggy ground near Bidford Grange, in a field opposite Trent's-lane Turnpike, and in a running stream of Mr. Wilkes's, at Broome, near the Field Barn where it grows most luxuriantly.

239. JUN' CUS ULIGINO' SUS V. S. 7.

Bog Rush. Little bulbous viviparous Rush.

SP. CH. Straws trailing, proliferous from the heads of flowers; leaves like bristles, somewhat knotted. With. 340. E. B. 801. Syn. *J. viviparus*. Abbot, 367.

Bogs. July. Rare. P.

Bromsgrove Lickey, Worcestershire. Coleshill Pool, Warwickshire.

240. JUN' CUS BUFO' NIUS V. S. 8.

Toad Rush. Toad Grass.

SP. CH. Straw forked; flowers single, sitting; leaves angular. *With.* 341. *E. B.* 802. *Park.* 1190. 8. *Abbot*, 269. *Robson*, 216.

Wet places. July. Common. A.

OBS.

This plant has so much the resemblance of grass, that a casual observer would often mistake it for such.

241. JUN'CUS CAMPES'TRIS V. S. 9.
Hairy field Rush. Meadow Rush.

SP. CH. Leaves flat, hairy; spikes sitting, and on fruit-stalks. *With.* 343. *E. B.* 672. *Abbot*, 272. *Robson*, 216.

Meadows and pastures. April. Common. P.

242. JUN'CUS PILO'SUS V. S. 10.
Hairy Rush.

SP. CH. Leaves flat, hairy; corymbus branching; flowers single. *With.* 342. *E. B.* 736. *Park.* 1184. 1. *Abbot*, 270. *Robson*, 216.

Woods. April. Common. P.

243. JUN'CUS MAX'IMUS V. S. 11.
Great Wood Rush.

SP. CH. Leaves flat, hairy; panicle terminating, very much branched; flowers 1, 2, or 3 together.

With. 342. *Park.* 1185. 3. *Syn.* *J. sylvaticus*:
E. B. 737. *Abbot*, 271. *Robson*, 216.

Woods. May. Common. P.

OBS.

This has much the habit of the preceding species; but as the pilosus has only one flower, and the maximus has several together, that will be a sufficient mark of distinction.

244. JUN'CUS LI'NIGER V. S. 12.
 Flaxen Rush.

SP. CH. Panicle larger, more compact than the *J. campestris*; spikes globular; straw and leaves as long again. *With.* 343. *Park.* 1186. 9.

Turfy Bogs. June. Rare. P.

On the side of the road from Coughton to Sam-bourne.

OBS.

This has much resemblance to the J. campestris; it is a loftier plant, and is covered with a much greater quantity of the flax-like substance; it also flowers full a month later, and the heads of flowers are more compact and globular.

Genus 11.

BER'BERIS. Barberry.

NAT. ORD. Trihilatæ.

GEN. CH. Cup of 6 leaves; petals 6, with two glands to the claw; style none; berry with 2 seeds.

Species.

245. BER' BERIS VULGA' RIS V. S. 1.
Common Barberry.

SP. CH. Fruit-stalks forming bunches; thorns 3 together. *With.* 344. *E. B.* 49. *Woodville*, 234. *Abbot*, 273. *Robson*, 67.

Woods and hedges. May. Now rare. S.

Oversley. Grafton. Bilsley.

OBS.

It is a well established fact that corn is much injured by growing near to this shrub; which has been sufficiently verified in this neighbourhood. About thirty years ago, a great landholder sold a very large estate within five miles of Alcester. When he was in possession of it, the fact was notorious, that the wheat never throve. At this time and for many years past, there is no land where the corn is finer and of a better quality. How is this to be accounted for? the answer is ready; there is not a barberry bush left standing; where for ages before, there was scarcely a hedge row without one. I will mention another instance of the deleterious and destructive effects of this shrub. Mr. Silvester, of Oversley, a respectable farmer (who was well acquainted with the injury that the

barberry bush produced), immediately on his entering upon a farm at Broome, about three miles from hence, rooted up every plant; but in the second year perceiving that in one part of a field of wheat, the ears were affected in a line almost through the middle of it, he traced it to the hedge row, and there found a single shoot that had sprung from a root which had been overlooked. It is said that Mons. Broussonet, a celebrated French naturalist, has refuted this very extraordinary though prevalent opinion; but such facts as these, that I have related, are too stubborn to be readily overturned. See Woodville & Withering. "The roots of this shrub boiled in lye, dye wool yellow. In Poland they dye leather of a most beautiful yellow with the bark of the root. The inner bark of the stems also dyes linen of a fine yellow, with the assistance of alum."

Genus 12.

PEP' LIS. Purslane.

NAT. ORD. Calycanthemæ.

GEN. CH. Calyx bell-shaped, rim 12-cleft, petals 6, inserted in the cup; capsule superior, 2-celled; with many seeds.

Species.

246. PEP' LIS POR' TULA V. S. 1.
Water Purslane.

SP. CH. Flowers often without petals; stem creeping; flowers in the wings of the leaves; petals very minute and fugacious. *With.* 346. *E. B.* 1211. *Park.* 1260. 4. *Abbot*, 261. *Robson*, 118.

Marshy and watery places, especially such as become dry in summer. July. September. Rare. A.

At Cookhill by the side of a pool, Worcestershire, and at the top of Sperrall-lane, also at Coleshill pool, &c. Warwickshire.

OBS.

Both blossom and filaments of a pinky red; the petals are very seldom seen, as they drop off before the calyx expands. The allotted number of rose-coloured petals is seldom complete; in the greater number of the flowers, of one and the same plant, the blossom is altogether wanting.

ORDER III.

TRIGYNIA. Three pointals.

Genus 1.

COL'CHICUM. Meadow Saffron;

NAT. ORD. Spathaceæ.

GEN. CH. Calyx none; blossom with 6 segments, tube very long, extending down to the root; capsules 3, connected, inflated.

Species.

247. COL'CHICUM AUTUMNA'LE : . . V. S. 1.
Common Meadow Saffron.

SP. CH. Leaves flat, spear-shaped, upright. *With.*
353. E. B. 133. *Woodville*, 177. *Abbot*,
283. *Robson*, 143.

Var. Flore albo or with a white blossom; meadows,
Whitacre. *Bree*.

Wet meadows. September. Common. P.

OBS.

The flowers shoot up in the autumn, the leaves not till the following spring. "The seeds lie buried all winter within the root; in the spring they grow up on a fruit-stalk, and are ripe about the time of hay harvest. As this plant blossoms late in the year, and probably would not have time to ripen its seeds before the approach of winter, which would destroy them; providence has contrived its structure so that this important office may be performed at a depth in the earth, out of the reach of the usual effects of frost; and as seeds buried at such a depth, are known not to vegetate; a no less admirable provision is made to raise them above the surface when they are perfected, and to sow them at a proper season." Withering.

Farmers should be cautious of turning hungry cattle into fields where this plant grows; as very fatal effects have ensued to a number of calves,

that were turned into a field early in the spring, where the principal herbage consisted of the meadow saffron.—There is an oxymel made of the roots which is a very useful pectoral and diuretic; and the famous French medicine for the gout, “the Eau Medicinale,” is found to be a tincture prepared from this plant. See Med. & P. Journal.

Genus 2.

RU'MEX. Dock.

NAT. ORD. Oleraceæ.

GEN. CH. Cup with 3 leaves; petals 3, closing; seed 1, three-cornered, inclosed in the blossom.

Species.

248. RU'MEX OBTUSIFO'LIUS 1.
Blunt-leaved Dock.

SP. CH. Leaves heart-oblong, bluntish, finely notched. *With.* 350. *E. B.* 1999. *Abbot*, 277. *Robson*, 232.

Amongst rubbish, road sides. July. Common. P.

OBS.

Fallow deer eat both this and the R. acutus with avidity, biting it close to the root, so that it is very rare to see a dock growing in a park. Withering.

249. RU'MEX ACU'TUS 2.
Sharp-pointed Dock.

SP. CH. Valves veinless; leaves oval spear-shaped, uneven at the edges. *With.* 347. *E. B.* 724. *Robson*, 232.

Woods, hedges, sides of roads and rivulets. July. Common. P.

OBS.

The root is used by the dyers. It gives a great variety of shades, from straw colour to a fine olive, and a fine deep green to cloths which have been previously blued. Withering.

250. RU'MEX CRIS'PUS 3.
Curled dock.

SP. CH. Valves strongly veined; leaves spear-shaped, acute, waved and curled at the edge. *With.* 346. *E. B.* 1998. *Abbot* 275. *Robson*, 231.

Pastures, and road sides. July. Common. P.

251. RU'MEX HYDROLA'PATHUM 4.
Great Water Dock.

SP. CH. Valves entire, with grains; leaves spear-shaped, smooth, acute, very entire, tapering at the base. *With.* 348. *E. B.* 2104. *Woodville*, 178. *Park.* 1225. 7. *Abbot*, 279. *Syn. Rumex aquaticus.* *Robson*, 232.

Wet ditches and rivers. July. Rare. P.

Side of the Avon, near Bidford. River Arrow, near Alcester. In a wet ditch at Spechley, Worcestershire.

OBS.

Four, five or six feet high; leaves on leaf-stalks as long as the stem. "It is a medicine of considerable efficacy, both externally applied as a wash for putrid spongy gums, and internally in some species of scurvy. The powdered root is one of the best things for cleaning the teeth." Withering.

252. RU'MEX ACETO'SA V.S. 5.
Common Sorrel.

SP. CH. Flowers dioicous, or the stamens and pointals on distinct plants; leaves oblong arrow-shaped. *With.* 350. *E. B.* 127. *Woodville*, 69. *Abbot*, 281. *Robson*, 232.

Pastures. June. Common. P.

OBS.

The leaves are eaten in sauces and in salads. The dried root gives out a beautiful red colour when boiled. A salt, sold for salt of lemons, is prepared in Germany, from the expressed juice of this plant, and is imported into England in considerable quantities. Withering.

253. RU'MEX ACETOSEL'LA V.S. 6.
Sheep's Sorrel.

SP. CH. Flowers dioicous; leaves spear-halberd-shaped. *With.* 351. *E. B.* 1674. *Park.* 744. 13. *Abbot*, 280. *Robson*, 233.

Heaths and dry pastures. Common. July. P.

254. RU'MEX PULCHER V. S. 7.
Fiddle Dock.

SP. CH. Root-leaves fiddle-shaped. *With.* 349.
Abbot, 278. *E. B.* 1576. *Robson*, 231.

On rubbish, dry meadows and road sides. July,
August. Not rare. P.

OBS.

This plant is not very unlike in habit to the R. acutus; the stem is furnished with fewer leaves, and it is a smaller plant. The hollow on each side of the radical leaves, which gives the trivial name, is but a very imperfect resemblance to a fiddle.

Genus 3.

TRIGLO'CHIN. Arrow-grass.

NAT. ORD. Tripetaloideæ.

GEN. CH. Calyx of 3 leaves; petals 3, like a cup;
style none; capsule opening at the base.

Species.

255. TRIGLO'CHIN PALUS'TRE V. S. 1.
Marsh Arrow-grass.

SP. CH. Capsule with 3 cells, nearly strap-shaped.
With. 352. *E. B.* 366. *Park.* 1187. 6. *Abbot*,
282. *Robson*, 143.

Marshes, wet meadows and pastures. July. Rare.
P.

At Mr. Bloxam's field, at the edge of the water.
Above the village of Great Alne, in some boggy
ground, Warwickshire. Feckenham, Worces-
tershire.

OBS.

*"The pointed valves of the capsule opening at
the base, gives it the appearance of the head of an
arrow."*

ORDER XIV.

POLYGINIA. Many pointals.

Genus 1.

ALIS'MA. Water Plantain.

NAT. ORD. Tripetaloideæ.

GEN. CH. Cup of 5 leaves; petals 3; many seeds.

Species.

256. ALIS'MA PLANTA'GO V.S. 1.
Great Water Plantain. Thrumwort.

SP. CH. Leaves ovate, sharp, on leaf-stalks; seeds
3-square, blunt. *With.* 354. *E. B.* 837. *Abbot*,
284. *Robson*, 198.

Ditches, sides of rivers. July. Common. P.

OBS.

*The leaves and the great length of the stalks be-
fore the flowering stem makes its appearance,
produces in the mind the idea of a more noble
plant.*

257. ALIS' MA RANUNCULOI' DES . . . V. S. 2.
Small Water Plantain.

SP. CH. Leaves strap-spear-shaped; fruit round,
scurfy. *With*, 355. *E. B.* 326. *Abbot*, 285.
Robson, 198.

Wet turfy bogs. June. Rare. P.

In a ditch surrounding Feckenham Bog, Worces-
tershire.

CLASS VII.

HEPTANDRIA. Seven stamens.

ORDER I.

MONOGYNIA. One pointal.

Genus 1.

AES'CULUS. Horse Chesnut.

NAT. ORD. Trihilatæ.

GEN. CH. Cup of 1 leaf, 5-cleft; corol of 5 petals,
inserted into the calyx and unequally coloured;
capsule with 3 cells.

Species.

258. AES'CULUS HIPPOCASTA'NUM . . . 1.
Common Horse Chesnut.

SP. CH. Leaves digitated, of seven lobes. *Wood-
ville*, 128.

OBS.

This noble tree may be said to be almost naturalized to the British Isles. See Note 5.

CLASS VIII.

OCTANDRIA. Eight stamens.

ORDER I.

MONOGYNIA. One pointal.

Genus 1.

EPILOBIUM. Willow-herb.

NAT. ORD. Calycanthemæ.

GEN. CH. Cup 4 segments, petals 4; capsule oblong, inferior; seeds downy.

Species.

259. EPILOBIUM MONTANUM . . . V. S. 1.
Smooth Willow-herb.

SP. CH. Leaves opposite, egg-shaped, toothed, the upper ones alternate; stem cylindrical. *With.*

360. *E. B.* 1177. *Abbot*, 289. *Robson*, 94.

Woods. July. Common. P.

260. EPILOBIUM PALUSTRE . . . V. S. 2.
Marsh Willow-herb.

SP. CH. Leaves opposite, spear-shaped, very entire;

petals nicked; stem round, upright. *With.* 360. *Abbot*, 291. *E. B.* 346. *Robson*, 94.

Ditches, marshes, bogs. July. Rare. P.

Feckenham Bog, Worcestershire. Coleshill Bog, Warwickshire.

261. EPILOBIUM HIRSU'TUM . . . V. S. 3.

Great Hairy Willow-herb. Codlins and Cream.

SP. CH. Leaves egg-spear-shaped, hairy, half embracing the stem, serrated; stem very much branched and hairy. *With.* 359. *E. B.* 838. *Abbot*, 287. *Robson*, 94.

Wet ditches and banks of brooks. Common. July. P.

OBS.

Goats are extremely fond of it. Cows and sheep eat it. Horses and swine refuse it. An infusion of the plant has an intoxicating property. The down mixed with cotton has been manufactured into stockings, &c. Withering.

262. EPILOBIUM TETRAGO'NUM . . . V. S. 4.

Square-stalked Willow-herb.

SP. CH. Leaves spear-shaped, finely toothed; stem 4-cornered; stigma entire. *With.* 360. *E. B.* 1948. *Abbot*, 290. *Robson*, 94.

Marshes, sides of rivulets and ditches. Rare. P.

Side of the Arrow. Marshy places about Bidford, &c.

263. EPILO'BIIUM PARVIFLO'RUM . . . V. S. 5.
Small flowered Willow-herb.

SP. CH. Leaves oblong-spear-shaped, toothed, downy; stem round, woolly, unbranched. *With.* 359. *E. B.* 795. *Syn. E. villosum.* *Abbot*, 288.

Wet ditches and watery places. Common. July.
P.

Genus 2.

ERI'CA. Heath.

NAT. ORD. Bicornes.

GEN. CH. Cup of 4 leaves; blossom 4-cleft; threads or filaments fixed to the receptacle; anthers cloven and perforated at the top; capsule with 4 cells.

Species.

264. ERI'CA VULGA'RIS . . . V. S. 1.
Common Heath. Ling. Hather.

SP. CH. Anthers awned; blossoms bell-shaped, nearly equal; cups double; leaves opposite, arrow-shaped. *With.* 367. *E. B.* 1013. *Abbot*, 295. *Robson*, 70.

Heaths. July. Common. S.

265. ERI'CA TE'TRALIX . . . V. S. 2.
Cross-leaved Heath.

SP. CH. Anthers awned; blossoms ovate; style within the flower; leaves in fours, fringed; flowers in heads. *With.* 367. *E. B.* 1014. *Abbot*, 296. *Robson*, 70.

Wet heaths. July. Rare. S.

OBS.

The fringes of the leaves tipped with globules; flowers round, a beautiful pale pink; flowering in a half circle.

Studley Common, Warwickshire. Astwood, Worcestershire.

266. ERI'CA CINE'REA V. S. 3.
Fine-leaved Heath.

SP. CH. Anthers crested; blossoms egg-shaped; style mostly projecting; stigma knobbed; leaves in threes. *With.* 368. *E. B.* 1015. *Robson*, 70.

Dry heaths. Common. July. S.

Var. Flore albo, or with a white blossom.

Coleshill Heath. *Bree*.

Genus 3.

CHLO'RA. Yellow-wort.

NAT. ORD. Rotaceæ.

GEN. CH. Cup of 8 leaves; corol of 1 petal, 8-cleft; capsule with 1 cell, 2 valves, many seeds; stigma cloven into 4.

Species.

267. CHLO'RA PERFOLIA'TA V. S. 1.
Perfoliate Yellow-wort. Yellow Centaury.

SP. CH. Leaves perforated by the stem. *With.* 363.
Abbot, 292. *E. B.* 60. *Syn. Gentiana perfo-*
liata. *Robson*, 79.

Stiff clay or marly grounds. Pastures in a calcare-
 ous soil. Not very rare. July. A.

Great Alne. Grafton. On the side of the turn-
 pike road opposite Roll's Wood, &c. &c.

OBS.

*This is one of the most beautiful and elegant of
 our native plants.*

Genus 4.

DAPH'NE. Mezereon.

NAT. ORD. Vepreculæ.

GEN. CH. Calyx none; blossom 4-cleft, of the true
 figure of a coral, withering, inclosing the fila-
 ments; berry with 1 seed.

Species:

268. DAPH'NE LAURE'OLA V. S. 1.
 Spurge Laurel. Laurel Mezereon.

SP. CH. Bunches from the bosom of the leaves,
 containing 5 flowers; leaves spear-shaped, smooth.
With. 371. *E. B.* 119. *Abbot*, 297. *Robson*,
 57.

Woods and hedges. Common. March. S.

Oversley Wood. Grafton, &c.

OBS.

Very happy effects have been experienced from this plant in rheumatic cases. It operates as a brisk and rather severe purgative. It is an efficacious medicine in worm cases; and upon many accounts deserves to be better known to the faculty; but in unskilful hands it would be dangerous. The whole plant has the same qualities, but the bark of the root is the strongest. Withering.

Genus 5.

OENO'THERA. Tree-primrose.

NAT. ORD. Calycanthemæ.

GEN. CH. Blossom 4 petals; calyx 4-cleft; capsule cylindrical, inferior; seeds naked.

Species.

269. OENO'THERA BIEN'NIS 1.

Tree-primrose

SP. CH. Leaves egg-spear-shaped, flat; stem covered with sharp points and soft hairs. *With.* 361.

E. B. 1534.

In Worcestershire. *Rev. Mr. Bourne. Withering.*

OBS.

This plant, so common in gardens, is now introduced as British; it has been found wild in many parts of this kingdom. It blossoms in August. B.

Genus 6.

VACCIN'IUM. Bilberry. Whortle-berry.

NAT. ORD. Bicornes.

GEN. CH. Calyx superior; blossom 1 petal; filaments inserted into the receptacle; berry with 4 cells, many seeds.

Species.

270. VACCIN'IUM MYRTIL'LUS . . . V. S. 1.
 Bilberries. Black Whorts.

SP. CH. Fruit-stalks with 1 flower; leaves serrated, ovate, deciduous; stem angular. *With.* 364.
E. B. 456. *Abbot*, 293. *Robson*, 56.

Woods and heaths. April. Not common. S.
 Woods about Studley.

271. VACCIN'IUM OXYCOC'CUS . . . V. S. 2.
 Cranberries. Marsh Whorts. Moorberries, &c.

SP. CH. Leaves very entire, turned or rolled back at the edges, ovate; stems trailing, thread-shaped, naked. *With.* 365. *E. B.* 319. *Abbot*, 294.
Robson, 56.

Peaty bogs. June. Rare. S.

Bromsgrove Lickey, Worcestershire. Coleshill Bog, Warwickshire.

OBS:

Leaves hoary underneath.

ORDER III.

TRIGYNIA. Three pointals.

Genus 1.

POLYG'ONUM. Knot Grass.

NAT. ORD. Oleraceæ.

GEN. CH. Cup none; corol 5-cleft, of the nature of a calyx; seed 1, angular.

Species.

272. POLYG'ONUM BISTOR'TA . . . V. S. 1.
Great Bistort. Red-legs. Snakeweed.

SP. CH. Stem unbranched with a single spike, leaves egg-shaped, running down into a leaf-stalk.
Woodville, 34. *With.* 376. *E. B.* 509. *Abbot*, 298. *Robson*, p. 233. *Park.* 392. 1.

Wet meadows. May. Rare. P.

Near Bromsgrove, on the side of the Kidderminster road, Worcestershire. In a field at Oversley, Warwickshire.

OBS.

The root is one of the strongest vegetable astringents. In the North of England, this plant is known by the name of Easter-giant, and the young leaves are eaten in herb pudding. Woodville. About Manchester they are substituted for greens, under the name of patience dock. Mr. Caley. v. Withering.

273. POLYG'ONUM AVICULA'RE . . . V. S. 2.
Knot-grass. Pig-grass.

SP. CH. Flowers from the bosom of the leaves ;
leaves spear-shaped ; stem trailing. *With.* 377.
E. B. 1252. *Abbot*, 304. *Robson*, 234.

Road sides, cornfields ; especially in a gravelly soil,
paths, streets, &c. June. Very common. A.

OBS.

The seeds are useful for every purpose in which those of the buckwheat (P. Fagopyrum) are employed. Great numbers of small birds feed upon them. Cows, goats, sheep, horses and swine, eat it. Withering. The stubbles in Sweden are purpled over with this plant. - Linn.

274. POLYG'ONUM CONVOL'VULUS . . . V. S. 3.
Black Bindweed. Climbing Snakeweed.

SP. CH. Leaves cordate or heart-shaped ; stem twining, angular ; flowers blunted. *With.* 379. *E. B.* 941. *Abbot*, 306. *Robson*, 235.

Cornfields, gardens. July. Common. A.

OBS.

The seeds are quite as good for use as any of the species ; are produced in greater quantity, and the plant bears cold better. Withering.

275. POLYG'ONUM PERSICA'RIA . . . V. S. 4.
Common Persicaria. Spotted Persicaria.

SP. CH. Stamens 6; styles cloven; spikes ovate, oblong; leaves spear-shaped; stipulæ or leaf scales fringed.

With. 374. *E. B.* 756. *Abbot*, 300. *Robson*, 234.

Wet places by road sides, ditches, and not unfrequently in cornfields. July. Common. A.

OBS.

Woollen cloth dipped in a solution of alum, obtains a yellow colour from this plant. Goats, sheep, and horses eat it; cows and swine refuse it. Linn.

276. POLYG'ONUM HYDROPI'PER . . . V. S. 5.

Biting Persicaria, or Snakeweed. Water Pepper.

SP. CH. Stamens 6; styles deeply cloven; leaves spear-shaped; leaf-scales somewhat fringed.

With. 373. *E. B.* 989. *Abbot*, 302. *Robson*, p. 233.

Wet places. Common. August. A.

OBS.

The whole plant has an acrid, burning taste. It dyes wool yellow. Horses, cows, goats, sheep and swine refuse it. Withering.

277. POLYG'ONUM AMPHIB'IUM . . . V. S. 6.

Amphibious Persicaria.

SP. CH. Stamens 5; styles cloven; spike egg-shaped; leaves oblong-spear-shaped, rounded or blunt at the point; very smooth. *With.* 372. *E. B.* 436. *Abbot*, 229. *Robson*, p. 233.

Pools, lakes, marshes and ditches. July. Not rare. P.

Floating on the Avon opposite Rev. H. Holyoake's, of Bidford Grange; and at Kinwarton, on the Alne.

278. POLYG'ONUM PAL'LIDUM V. S. 7.
Pale Persicaria. Pale-flowered Snakeweed.

SP. CH. Stamens 6; styles cloven; stipulæ or leaf-scales not fringed; fruit-stalks rough with glands; seeds flatted on both sides. *With.* 374. *Syn.* *P. lapathifolium.* *E. B.* 1382. *Abbot*, 301.

Dunghills, cornfields, and on the side of water. August. Common. P.

OBS.

In the ditch at the bottom of the bleachfield. The specific character is so pointedly correct, that it is scarcely necessary to make any farther observation. The species appears to be the flea-bitten variety of Withering; as the whole of the stem was covered with oblong spots very much resembling flea-bites.

279. POLYG'ONUM FAGOPY'RUM . . V. S. 8.
Buckwheat. French Wheat.

SP. CH. Leaves heart-arrow-shaped; stem nearly

upright, without prickles; angles of the seeds even. *With.* 378. *E. B.* 1004. *Park.* 1141. *Abbot*, 305. *Robson*, p. 235.

Cornfields, woods. Rare. A.

Ridgway.

OBS.

This plant is very impatient of cold, dying at the very first attack of frost. The seed ground into meal, is made into thin cakes in some parts of England, called crumpits; they are very nutritious, and are not apt to turn acid upon the stomach. Sheep that eat this plant become unhealthy. The seeds are excellent food for poultry. Withering.

ORDER IV.

TETRAGYNIA. Four pointals.

Genus 1.

PA'RIS. Herb Paris.

NAT. ORD. Sarmentaceæ.

GEN. CH. Cup 4 leaves; petals 4, narrower than the cup; berry with 4 cells.

Species.

280. PA'RIS QUADRIFO'LIA . . . V. S. 1.

Herb Paris. True-love. One-berry.

SP. CH. Stem leaves generally 4. *With.* 379. *E. B.*

7. *Park.* 390-1: *Abbot*, 307. *Robson*, p. 62.

Woods and shady places. May. Rare. P.

Spernall Park, Warwickshire. Cliff Wood, near
Bridgnorth, Shropshire. *Hall*.

OBS.

The leaves and berries are said to partake of the properties of opium. The juice of the berries is useful in inflammations of the eyes. Linnæus says the roots will vomit as well as ipecacuanha, but it must be given in a double quantity. Withering.

Genus 2.

ADOX'A. Moschatel.

NAT. ORD. Succulentæ.

GEN. CH. Cup 2 segments, inferior; blossom 4 or 5-cleft, superior; berry 4 or 5 cells, united with the cup.

Species.

281. ADOX'A MOSCHATEL' LINA . . . V. S. 1.
Tuberous Moschatel.

SP. CH. ——— *With.* 380. *E. B.* 453. *Abbot*, 308. *Robson*, p. 55.

Woods, and damp shady places. Rare. April. P.
Alcester Mill in the rough ground by the flood-gates. Dingles near Hord's Park. Shropshire.

OBS.

Stamens 8, pointals 4, in the terminating flower; the lateral flowers have 10 stamens, and 5 pointals. Withering. See Obs. to species 292.

CLASS IX.

ENNEANDRIA. Nine stamens.

ORDER III.

TRIGYNIA. Three pointals.

Genus 1.

RHE'UM. Rhubarb.*

NAT. ORD. Oleraceæ.

GEN. CH. Cup none; corol of 1 leaf, 6-cleft; seeds 1, 3-sided.

Species.

282. RHE'UM RHAPON'TICUM 1.
English Rhubarb.

SP. CH. Leaves smooth, roundish heart-shape; petioles or leaf-stalks thick, reddish, a little channelled on their lower part, but flat at the top; flower stem is purple; 2 to 3 feet high, terminated

* See note 5.

by thick, close, obtuse spikes of white flowers.
Flowers in June. P.

OBS.

Cultivated in gardens. The petioles of the leaves are much esteemed for making tarts; and as they come in some time before gooseberries, are a very useful and wholesome vegetable; and in my opinion far superior in flavour to the young gooseberry.

ORDER VI.*

HEXAGYNIA. Six pointals.

Genus 1.

BU'TOMUS. Flowering-rush.

NAT. ORD. Tripetaloidæ.

GEN. CH. Cup none, but a three-leaved involucre;
a corol of 6 petals, and a capsule of 6 cells, containing many seeds; seeds fixed to the sides of the capsules.

Species.

283. BU'TOMUS UMBELLA'TUS . . . V. S. 1.
Flowering-rush. Water Gladiole.

* This is put Order I. in the English Botany, which is not the method followed here. The Orders are arranged generally according to the number of pointals or stamens; therefore, might it not be said, there are no British genera in the five first orders? See note 2.

SP. CH. ——— *With.* 386. *E. B.* 651. *Park.*
1197. 1. *Abbot*, 309. *Robson*, 153.

Banks of rivers, slow streams and muddy ditches.
Not very rare. June. P.

Oversley Bridge. Ford at Great Alne Mill by the
Bridle Gate, &c. Warwickshire. Town's Mills,
Bridgnorth. *Hall*.

OBS.

*Stature 4 feet and more. Flowers on long fruit-
stalks, forming an umbel. It is one of the most
noble and beautiful of British plants.*

CLASS X.

DECANDRIA. Ten stamens.

ORDER I.

MONOGYNIA. One pointal.

Genus 1.

PY'ROLA. Winter-green.

NAT. ORD. Bicornes.

GEN. CH. Cup with 5 segments; petals 5; capsule
opening with 5 angles.

Species.

284. PY'ROLA ME'DIA V. S. 1
Intermediate Winter-green.

SP. CH. Flowers in a bunch; stamens straight; pointal bent elongated; fruit-stalk twisted. *E. B.* 1945.

Wood at Meriden. *Bree.* June.

ORDER II.

DIGYNIA. Two pointals.

Genus 1.

SAXIF' RAGA. Saxifrage.

NAT. ORD. Succulentæ.

GEN. CH. Cup 5 segments; corol 5 petals; capsule 2 beaks, 1 cell; many seeds.

Species.

285. SAXIF' RAGA GRANULA'TA V. S. 1.
White Saxifrage.

SP. CH. Stem leaves, kidney-shaped, lobed; stem branched; root beaded or with granulations. *Woodville*, 232. *With.* 396. *E. B.* 500. *Abbot*, 313. *Robson*, p. 103.

Dry meadows and pastures. May. Common. P.

286. SAXIF' RAGA TRIDACTYLI'TES V. S. 2.
Rue-leaved Saxifrage.

SP. CH. Stem leaves wedge-shaped, alternate 3 cleft; stem branched, upright. *With.* 397. *E. B.* 501. *Park.* 556. 4. *Abbot*, 314. *Robson*, p. 103.

Walls and roofs. April. Common. A.

OBS.

Turns red after flowering. An elegant little plant; the whole is thickly set with short hairs, terminated by red globules, which give it a clammy feel.

Genus 2.

DIAN'THUS. Pink.

NAT. ORD. Caryophyllæ.

GEN. CH. Calyx cylindrical, of 1 leaf, with 4 scales at the base; petals 5, with claws; capsule cylindrical, of 1 cell.

Species.

287. DIAN'THUS ARME'RIA . . . V. S. 1.
Deptford Pink.

SP. CH. Flowers incorporated or in bundles; scales of the calyx or cup spear-shaped, woolly, as long as the tube. *With.* 401. *E. B.* 317. *Robson*, p. 99.

Gravelly meadows and pastures. July. Very rare. A.

On a hedge bank leading from Coughton fields to Great Alne, in a field of Mr. Brown's, bounding the horse road. *Rufford*.

288. DIAN'THUS DELTOI'DES . . . V. S. 2.
Maiden Pink.

SP. CH. Flowers single; scales of the cup 2, egg-spear-shaped; petals toothed. *With.* 402. *E. B.* 61. *Abbot*, 317. *Robson*, p. 99.

Sandy meadows, pastures and heaths. June. Very rare. B.

Close to Quatford Church on the Morf, near Bridgnorth, Shropshire.

Genus 3.

SAPONA'RIA. Soap-wort.

NAT. ORD. Caryophyllæ.

GEN. CH. Cup of 1 leaf, naked, (that is, without scales at the base), petals 5, with claws; capsule oblong, 1 cell.

Species.

289. SAPONA'RIA OFFICINA'LIS . . . V. S. 1.
Soap-wort.

SP. CH. Calyx cylindrical; leaves egg-spear-shaped. *Woodville*, 251. *With.* 400. *E. B.* 1060. *Park.* 641. 1. *Abbot*, 315. *Robson*, 100.

Hedges and walls in moist situations. August. Very rare. P.

Hedge bank at Dunnington opposite to Mr. Gould's, Warwickshire. Banks of the Severn, above and below Bridgnorth. *Hall*.

OBS.

*The whole plant is bitter. Bruised and agitated with water it raises a lather like soap; a similar soapy quality is observable also in the extract, in-
somuch that they have been used by the mendicant monks as a substitute for soap in washing their clothes. It also possesses very considerable medical qualities; for which, and a very excellent plate of the plant, see Woodville's Medical Botany.*

Genus 4.

SCLERAN'THUS. Knawel.

NAT. ORD. Caryophyllæ.

GEN. CH. Cup of 1 leaf; blossom none; seeds 2, inclosed in the cup.

Species:

290. SCLERAN'THUS AN'NUUS . . . V. S. 1.
Annual Knawel.

SP. CH. Cups open when the seed is ripe; segments tapering to a point. *With.* 399. *E. B.* 351. *Abbot*, 315. *Robson*, p. 235.

Sandy ground in cornfields. July. Common. A.

OBS.

The whole plant prostrate; the cup closing when in blossom, expanding fully afterwards. "The Swedes and Germans receive the vapour arising from a decoction of it into their mouths to cure the tooth-ache. Goats and sheep eat it; cows refuse it." Withering.

Genus 5.

CHRYSOSPLENIUM. Golden Saxifrage.

NAT. ORD. Succulentæ.

GEN. CH. Calyx coloured, 4 or 5-cleft; corol none; capsule 2-beaked; 1 cell, and many seeds.

Species:

291. CHRYSOSPLENIUM OPPOSITIFOLIUM V. S. 1.
Opposite-leaved Golden Saxifrage, or Sengreen.

SP. CH. Leaves opposite. *With.* 393. *E. B.* 490.
Abbot, 312. *Robson*, 218.

Wet shady places, sides of rivulets. April. Rare,
P.

Sambourne. Great Alne.

292. CHRYSOSPLENIUM ALTERNIFOLIUM. . . . 2.
Alternate-leaved Golden Saxifrage, or Sengreen.

SP. CH. Leaves alternate. *With.* 392. *E. B.* 54.
Robson, 218.

Wet shady woods. Very rare. April. P.

Balsal Temple, Warwickshire. Bree. Near
Bridgnorth. Hall.

OBS.

Stamens in the terminating flowers 10, in the rest 8. Linn. The young botanist may be often puzzled in the examination of the flowers of some plants; for there may be only one flower in the group, which will answer to the generic characters. "This has been made an objection by some to the Linnæan system. The illustrious author however has extricated himself from the difficulty, by forming his character upon the principal, or terminating flower as he calls it, and announcing the anomaly."

ORDER III.

TRIGYNIA. Three pointals.

Genus 1.

STELLA'RIA. Stitchwort.

NAT. ORD. Caryophyllææ.

GEN. CH. Calyx 5 leaves, expanding; petals 5, deeply cloven; capsule 1 cell; many seeds.

Species:

293. STELLA'RIA HOLO'STEA . . . V.S. 1.
Great Stitchwort.

SP. CH. Leaves spear-shaped, very finely serrated;

petals cloven. *With.* 409. *E. B.* 511: *Abbot*, 321. *Robson*, 212.

Woods, hedges. May. Common. P.

OBS.

Leaves opposite, sitting; alternately pointing different ways up the stem.

294. STELLA'RIA GRAMIN'EA . . . V. S. 2.
Small Stitchwort.

SP. CH. Leaves strap-shaped, very entire; flowers in panicles. *With.* 411. *E. B.* 803. *Abbot*, 322. *Robson*, p. 112.

Hedge-banks, meadows. May. Common. P.

295. STELLA'RIA ME'DIA . . . V. S. 3.
Common Chickweed.

SP. CH. Petals deeply divided; leaves egg-heart-shaped; stems with a hairy ridge on one side. *With.* 409. *E. B.* 537. *Syn. Alsine media. Linn.* *Robson*, 111,

Fields and gardens. April. Common. A.

OBS.

The young leaves and shoots make no bad addition to the spring salads.

296. STELLA'RIA ULIGINO'SA . . . V. S. 4.
Bog Stitchwort.

SP. CH. Leaves spear-shaped, very entire; stems trailing; panicles lateral. *With.* 412. *E. B.* 1074. *Abbot*, 324.

Rivulets and bogs. June. Rare. A.

Cookhill, Worcestershire, on some boggy ground.

OBS.

The petals are shorter than the calyx, the segments straddling, or at a considerable distance from each other. The straddling of the petals appears to be very characteristic.

297. STELLA'RIA NEM'ORUM . . . V. S. 5.

Wood Stitchwort. Broad-leaved Stitchwort.

SP. CH. Lower leaves heart-shaped, on leaf-stalks; panicle with forked fruit-stalks. *With.* 409. *E. B.* 92. *Park.* 762. 1. *Robson*, p. 112.

OBS.

From 5 to 12 inches high. Stems very brittle. There is much resemblance to the cerastium aquaticum, but the former having three pointals and the latter always five, they cannot well be mistaken. It is rather extraordinary that this plant has sprung up annually in a shady part of my garden for some years, and has not yet been found any where else in the neighbourhood.

Genus 2.

CUCU'BALUS. Campion.

NAT. ORD. Caryophyllæ.

GEN. CH. Cup inflated; petals 5, with claws, not crowned at the mouth; capsule with 3 cells.

Species.

298. CUCU'BALUS BE'HEN V. S. 1.
Spatling Campion. Bladder Campion.

SP. CH. Cups nearly round, smooth, with net-work veins; leaves egg-spear-shaped, glaucous, smooth; capsules 3-celled; blossoms nearly naked. *With.* 403. *Abbot*, 318. *Robson*, 101. *Syn. Silene inflata.* *E. B.* 164.

Cornfields. June. Common. P.

OBS.

The leaves boiled, have something of the flavour of peas.

Genus 3.

ARENARIA. Sandwort.

NAT. ORD. Caryophyllæ.

GEN. CH. Cup of 5 leaves, expanding; petals 5, entire; capsule 1 cell, with many seeds.

Species.

299. ARENARIA RU'BRA V. S. 1.
Purple Sandwort.

SP. CH. Leaves thread shaped; leaf-scales shining

at the edge, sheathing. *With* 414. *E. B.* 852.
Abbot, 327. *Robson*, 133.

Sandy fields, road sides. June. July. Rare. A.
 Turnpike road to New Inn, Alcester Parish.

300. ARENA'RIA TRINER'VIA V.S. 2.
 Plantain Sandwort.

SP. CH. Leaves egg-shaped, 3-fibred, pointed, on
 leaf-stalks. *With.* 413. *E. B.* 1483. *Abbot*,
 325.

Woods and wet hedges. June. Common. A.

OBS.

*This little plant may be readily taken for the
 Stellaria media, by a casual observer; but the
 leaves differ in being 3-ribbed; and the flower
 as well as the plant, is much more diminutive
 and slender in all its parts.*

301. ARENA'RIA SERPYLLIFO'LIA V.S. 3.
 Thyme-leaved Sandwort.

SP. CH. Leaves nearly ovate, pointed, sitting; blos-
 soms shorter than the cup. *With.* 413. *E. B.*
 923. *Abbot*, 326.

Roofs, walls, sandy and very dry places. June.
 Common. A.

302. ARENA'RIA MARI'NA V.S. 4.
 Sea Sandwort.

SP. CH. Leaves semi-cylindrical, tapering, opposite, as long as the joints; stipulæ or leaf-scales membranaceous, acute; stems prostrate; capsules longer than the calyx. *With.* 413. *E. B. v.* 14. *Tab.* 958. *Robson*, p. 413.

Salt marshes and on the sea coast. Common. May, October. P.

Defford Common, between Pershore and Upton, Worcestershire. *Rufford*.

OBS.

There are several springs of salt water on the common.

ORDER IV.*

PENTAGYNIA. Five pointals.

Genus 1.

OX'ALIS. Wood-sorrel.

NAT. ORD. Gruinales.

GEN. CH. Cup of 5 leaves; petals united by the claws; capsules opening by angles, 5-cornered.

Species.

303. OX'ALIS ACETOSEL'LA V. S. 1.
Common Wood-sorrel.

* See note 2, for my reasons in altering the arrangement of the Orders.

SP. CH. Stalk with 1 flower; leaves 3 together; leaflets inversely heart-shaped, hairy. *Woodville*, 20. *With.* 421. *E. B.* 762. *Abbot*, 334. *Park.* 746. 1.

Woods, shady hedges. April. Common. P.

OBS.

The expressed juice depurated, and properly evaporated, affords a crystalline acid salt, in considerable quantity. It is employed to take iron moulds out of linen, and is sold under the name of Essential Salt of Lemons. Withering.

Genus 2.

SE'DUM. Stone-crop.

NAT. ORD. Succulentæ.

GEN. CH. Cup 5-cleft; corol with 5 petals; 5 nectariferous scales at the base of the germ; capsules 5, distinct.

Species.

304. SE'DUM TELEPH'IUM V. S. 1.
Orpine Stone-crop.

SP. CH. Leaves flattish, serrated; corymbus leafy, or the flowers in a leafy flat-topped spike; stem upright. *With.* 418. *E. B.* 1319. *Abbot*, 329. *Robson*, 152. *Park.* 762. 2.

Pastures, hedges and woods. July. Rare. P.
Alne Hills.

Species.

305. SEDUM ACRE V. S. 2.
Acrid or biting Stone-crop.

SP. CH. Leaves nearly ovate, growing together and sitting, bellying or bulging, nearly erect, alternate, tuft of flowers with three divisions. *Woodville*, 231. *With.* 419. *E. B.* 839.

Walls and banks. June. Not very rare. P.

Walls at Wixford, on the Bridge, &c.

306. SEDUM REFLEXUM V. S. 3.
Yellow Stone-crop. Reflected Stone-crop.
Prickmadam.

SP. CH. Leaves awl-shaped, scattered, loose at the base, lower ones bowed back. *With.* 420. *E. B.* 695. *Abbot*, 333. *Park.* 735. 7. *Robson*, 152.

Walls and roofs. July. Not very rare. P.

On a wall at Salford opposite to Mr. Penrice's.
Alcester, &c. &c.

307. SEDUM DASYPHYLUM V. S. 4.
Thick-leaved Stone-crop.

SP. CH. Leaves opposite, ovate, blunt, fleshy; stem

weak; flowers scattered. *With.* 420. *E. B.* 656.
Abbot 330. *Robson*, 152.

Walls and roofs. June, July. Rare. P.

Badsey near Evesham, Worcestershire. *Rufford*.

Genus 3.

CERAS'TIUM. Mouse-ear Chickweed.

NAT. ORD. Caryophyllææ.

GEN. CH. Calyx of 5 leaves; petals cloven; capsule 1 cell, opening at the top.

OBS.

The capsule in some is egg-shaped, cylindrical; in others globular, opening with 10 teeth, and sometimes only with 5.

Species.

308. CERAS'TIUM VULGA'TUM V. S. 1.

Broad-leaved or common Mouse-ear Chickweed.

SP. CH. Leaves ovate; petals even with the cup; stems spreading. *Abbot*, 338. *E. B.* 789. *Syn.*

C. viscosum. *With* 425. *Robson*, 113.

Walls, dry banks, ant. hills, roads, bare gravel walks. April. Common. P.

309. CERAS'TIUM VISCO'SUM* V. S. 2.

*See note 4.

Clammy Mouse-ear. Narrow-leaved or Meadow Mouse-ear Chickweed.*

SP. CH. Upright, somewhat woolly and clammy. *Abbot*, 339. *E. B.* 790. *Syn. C. vulgatum.* *With.* 425. *Robson*, 114.

Meadows and pastures. May. Common. A.

OBS.

There appears still to be some confusion in distinguishing these two plants, and the trivial names are in some measure the cause. I take the C. viscosum of authors to be the plant, found in growing grass, often a foot or more in height, with the flowers in a kind of panicle. The vulgatum is named properly enough, as it certainly is the most common; it is found in every place almost all the year round, and the flowers are more crowded, and upon shorter foot-stalks than those of the viscosum; the latter is upright, the former spreading; also the C. viscosum is an annual, the vulgatum a perennial.

310. CERAS'TIUM ARVEN'SE V. S. 3.
Field Mouse-ear Chickweed.

SP. CH. Leaves strap-spear-shaped, bluntish, fringed at the base; blossoms larger than the calyx. *With.* 425. *E. B.* 93. *Park.* 1339. 7. *Abbot*, 341. *Robson*, 114.

Cornfields. May. Rare. P.

* Query; would not *Cerastium pratense* be a more proper distinction between these two plants.

On Broad-way Hills, Gloucestershire. *Rufford.*

311. CERAS'TIUM SEMIDECAN'DRUM . . . V. S. 4.

Little Mouse-ear Chickweed.

SP. CH. Flowers with 5 stamens; petals notched at the end. *With.* 427. *E. B.* 1630. *Abbot*, 340. *Robson*, 114.

Walls, pastures and heaths. April. Not common. A.

At Kinwarton, in a field near the church.

312. CERAS'TIUM AQUAT'ICUM . . . V. S. 5.

Water Mouse-ear Chickweed.

SP. CH. Leaves heart-shaped, sessile or sitting, flowers solitary; fruit pendent. *With.* 428. *E. B.* 538. *Abbot*, 342. *Park.* 759. 2.

Wet ditches, banks of rivers, amongst bushes. July. Common. P.

Genus 4.

LYCH'NIS. *Lychnis*:

NAT. ORD. Caryophyllæ.

GEN. CH. Calyx of 1 leaf, oblong, even; petals 5, with claws, limbs often cloven; capsule 1 to 5-celled.

Species.

313. Lych'NIS FLOS CU'CULI . . . V. S. 1.

Ragged *Lychnis*. Ragged Robin.

SP. CH. Petals 3 or 4-cleft; fruit roundish, of 1 cell.
With. 424. *E. B.* 573. *Abbot*, 336. *Robson*,
 102.

Moist meadows and pastures. June. Common. P.

314. Lych'nis diur'na V. S. 2.
 Red Lychnis, or Red-flowered Campion.

SP. CH. Flowers dioicous, or the stamens and poin-
 tals in distinct plants. Blossoms red; capsules
 roundish. *Syn. L. dioica. E. B.* 1579. *With.*
 423. *Abbot*, 337. *Robson*, 102.

Hedges, ditches and moist woods. June. Com-
 mon. P.

OBS.

Scentless; flowers stand open through the day.
Sibthorp. Fl. Oxon.

315. Lych'nis vesperti'na V. S. 3.
 White flowered Lychnis, or Campion.

SP. CH. Flowers dioicous; blossoms white; cap-
 sules conical. *Syn. L. dioica. E. B.* 1580.
With. 423.

Pastures and hedges. Common. June. P.

OBS.

Odoriferous; flowers only open towards evening.
The plants I have never seen intermixed, and the
latter is always a much larger plant than the
former.

Genus 5.

SPER'GULA. Spurrey.

NAT. ORD. Caryophyllæ.

GEN. CH. Cup of 5 leaves; petals 5, entire; capsule egg-shaped, of 1 cell and 5 valves.

Species.

316. SPER'GULA ARVEN'SIS V. S. 1.

Corn Spurrey. Rough-seeded corn Spurrey.

SP. CH. Leaves in whirls; 10 stamens in the flower; stems thick at the joints. *With.* 428. *E. B.*

1535. *Abbot*, 344. *Robson*, 114. *Park.* 562.

Cornfields and sandy places. June. Common. A.

317. SPER'GULA NODO'SA 2.

Knotted Spurrey.

SP. CH. Leaves opposite, awl-shaped, smooth; stems simple. *With.* 429. *E. B.* 694. *Abbot*, 346.

Robson, 115. *Park.* 427. 3.

Bogs. July. Rare. P.

Coleshill Heath, Warwickshire. *Bree.* Hanley,
near Malvern, Worcestershire. *Rufford.*

OBS.

The stem is sometimes trailing, but oftener upright; bearing a white flower large and out of proportion. The parts of fructification highly embellish this small but elegant plant. Abbot.

Genus 6.

AGROSTEM'MA. Cockle.

NAT. ORD. Caryophylleæ.

GEN. CH. Cup of 1 leaf, leathery; petals 5, with claws; border blunt, entire or not divided; capsule with 1 cell.

Species.

318. AGROSTEM'MA GITHA'GO . . . V. S. 1.
Common Cockle. Corn Cockle.

SP. CH. Hairy; cups longer than the blossom; petals entire, naked, or not crowned. *With.* 422.
E. B. 741. *Abbot*, 335. *Robson*, 102. *Park.* 632. 9.

Cornfields. July. Common. A.

Genus 7.

COTYLE'DON. Navelwort.

NAT. ORD. Succulentæ.

GEN. CH. Calyx 4 or 5-cleft; blossom 1 petal; nectariferous or honey-cup scales 5, at the base of the germ; capsules 5.

Species.

319. COTYLE'DON UMBILI'CUS . . . V. S. 1.
Common Navelwort. Wall Pennywort.

SP. CH. Leaves target or kidney-shaped, scalloped; stem nearly simple; flowers pendent; floral

leaves entire. *With.* 417. *E. B.* 325. *Park.* 740. 1. *Robson*, 151.

Old walls and moist rocks. Rare. June. P.

Quatford and Rowton, on the walls by the Turnpike Road, Shropshire. Maxtock Priory, Warwickshire. *Bree*.

CLASS XI.

DODECANDRIA. Twelve stamens.

CL. CH. Flowers containing from 12 to 19 stamens, and sometimes fewer than 12. The stamens in this Class are fixed to the receptacle.

ORDER I.

MONOGYNIA. One pointal.

Genus 1.

AS'ARUM. Asarabacca.

NAT. ORD. Sarmentaceæ.

GEN. CH. Calyx 3 or 4-cleft, sitting on the germens; blossom none; capsule like leather, crowned, of 6 cells, but no valves.

Species.

320. AS'ARUM EUROPÆUM 1.
Asarabacca.

SP. CH. Leaves kidney-shaped, blunt, in pairs.
With. 431. *Woodville*, 86. *Admirable.* *E. B.*
 1083. *Robson*, 218. *Park.* 266.

Woods and shady places. Very rare. May. P.

OBS.

This plant is introduced here on account of its medicinal properties. It has been found a good substitute for ipecacuanha, (see Woodville's Medical Botany). It may be cultivated very readily; there is a fine plant now growing in my garden. (See note 5.)

Genus 2.

LY'THRUM. Grasspoly.

NAT. ORD. Calycanthemæ.

GEN. CH. Cup 12-cleft; petals 6, inserted in the cup; capsules with 2 cells and many seeds.

Species.

321. LY'THRUM SALICA'RIA . . . V. S. 1.
 Purple-spiked Willow-herb or Grasspoly.

SP. CH. Leaves opposite or alternate, heart-spear-shaped; flowers in spikes with 12 stamens in each.
With. 432. *E. B.* 1061. *Abbot*, 347. *Park.*
 546. 1. *Robson*, 118.

Banks of rivers; adorning its sides very splendidly



Port. 1735 Pickershead (cf. J. S. Pickershead, London.)

in the months of July and August. Very common. P.

Var. with 3 leaves in a whirl; stem 6-cornered. *Withering.*

Marshes and banks of rivers. Common. P.

OBS.

The stem of the latter 6-cornered, that of the former a square.

322. LY[']THRUM HYSSOPIFO[']LIUM (*see fig. 2*) V.S. 1.
Hyssop-leaved Grasspoly.

SP. CH. Leaves alternate, strap shaped; with 6 stamens in each flower. *With.* 433. *E. B.* 292. *Park.* 220. 2. *Robson,* 118.

Watery places, and where water has stood during the winter. July, August. Very rare. A.

Badsey near Evesham. Stubble fields Bretforton, Worcestershire.

OBS.

This plant is scarcely as many inches in stature as the salicaria in feet; it gave me when I first found it, much trouble in the course of my botanical investigation. When we consider the anomaly in the number of stamens, which according to the Linnæan classification, places it in the Hexandria class; the difficulty will not be matter of surprize.

It certainly classes naturally with the Genus Lythrum.

ORDER II.

DIGYNIA. Two pointals.

Genus 1.

AGRIMO'NIA. Agrimony.

NAT. ORD. Senticosæ.

GEN. CH. Cup with five teeth, surrounded by an outer cup; petals 5; seeds 2, in the bottom of the cup.

Species.

323. AGRIMO'NIA EUPATO'RIA . . . V.S. 1
Common Agrimony.

SP. CH. Stem leaves winged, the odd one on a leaf-stalk; seeds rough with hair; the outer calyx consisting of hooked bristles. *Woodville*, 258. *With.* 434. *E. B.* 1335. *Abbot*, 349. *Robson*, 115.

Pastures and road sides. July. Common. P.

OBS.

It is a mild astringent and corroborant. The flowers fresh gathered, smell like apricots. Sheep and goats eat it. Cows, horses, and swine refuse it. Linn. Withering.

ORDER III.

TRIGYNIA. Three pointals.

Genus 1.

RESE'DA. Dyer's Weed.

NAT. ORD. Miscellanæ.

GEN. CH. Calyx 1 leaf, divided; petals jagged; capsule opening at the top; 1-celled.

Species.

324. RESE'DA LUTE'OLA V. S. 1.
Yellow Dyer's Weed. Yellow-weed.

SP. CH. Leaves spear-shaped, entire, with a tooth on each side the base; calyx 4-cleft. *With.* 436.

E. B. 320. *Abbot*, 350. *Robson*, 97.

Walls and way-sides. July. Not common. B.

On the hedge bank in the turnpike road at New Inn, and on the wall before Mr. Penrice's house, Salford.

OBS.

This plant affords a most beautiful yellow dye for cotton, woollens, mohair, silk and linen, and is that which is commonly used by the dyers, as it gives the brightest dye. Blue cloths dipped in a decoction of it become green. The yellow colour of the paint, called dutch pink, is obtained from

this plant. Cattle will not eat it, but sheep sometimes browse it a little. Withering.

Genus 2.

EUPHOR'BIA. Spurge.

NAT. ORD. Tricoccæ.

GEN. CH. Calyx 1 leaf, distended; blossom 4 or 5 petals, sitting on the calyx; capsules 3, united.

Species.

325. EUPHOR'BIA PE'PLUS . . . V. S. 1.
Petty Spurge.

SP. CH. Umbels with 3 divisions, forked; fencelets egg-shaped; leaves very entire, inversely ovate, or egg-shaped, on leaf-stalks. *With.* 438. *E. B.* 959. *Abbot*, 352. *Robson*, 95.

Gardens and fields. July. Common. A.

326. EUPHOR'BIA HELIOSCO'PIA . . . V. S. 2.
Sun Spurge.

SP. CH. Umbels with 5 divisions, smaller ones with 3, forked; involucellums or fencelets inversely egg-shaped; leaves serrated, wedge-shaped. *With.* 440. *E. B.* 883. *Abbot*, 354. *Robson*, 95.

Gardens and fields. July. Common. A.

327. EUPHOR'BIA AMYGDALOI'DES . . V. S. 3.
Wood Spurge.

SP. CH. Umbels with many divisions, forked; fencelets perforated by the stem, circular; leaves blunt. *With.* 443. *E. B.* 256. *Abbot*, 355. *Robson*, 96.

Woods and hedges. April. Common. P.

328. EUPHOR' BIA EXIG'UA V. S. 4.
Dwarf Spurge.

SP. CH. Umbels with 3 divisions, forked; fencelets spear-shaped; leaves strap-shaped. *With.* 438. *E. B.* 1336. *Abbot*, 353. *Robson*, 95.

Cornfields. June, September. Common. A.

OBS.

Petals 4, crescent shaped. This is a delicate and slender plant.

ORDER IV.

DODECAGYNIA. Twelve pointals.

Genus 1.

SEMPERVI'VUM. House-leek.

NAT. ORD. Succulentæ.

GEN. CH. Cup 12 segments; petals 12; capsules 12; with many seeds.

Species.

329. SEMPERVI'VUM TECTO'RUM
Common House-leek. Cyphel.

SP. CH. Leaves fringed ; off-sets expanding. *With.*
 444. *E. B.* 1320. *Park.* 731. 3. *Abbot,* 357.
Robson, 153.

Walls and roofs of houses. July. Common. P.

OBS.

The juice, either applied by itself, or mixed with cream, which is the best way of applying it, gives present relief in burns, and other external inflammations ; particularly those of the erysipelatous kind. Mixed with honey it is useful in apthous cases.

CLASS XII.

ICOSANDRIA. Twenty stamens.

CL. CH. 1. A cup, consisting of 1 concave leaf.

2. Petals fixed by the claws to the sides of the cup.

3. The filaments more than 19, fixed to the sides of the cup, or upon the blossom, but not upon the receptacle.

OBS.

It is of the utmost importance to distinguish this class and the next from the rest, and from each other. Remember always that it is not the number

but the situation of the stamens, which furnishes the classical character here. In the next they arise as they generally do in the other classes, from the receptacle; but in this they spring either directly, or with the parts of the corol, from the calyx.

ORDER I.

MONOGYNIA. One pointal.

Genus 1.

PRU'NUS. Plumb.

NAT. ORD. Pomaceæ.

GEN. CH. Cup 5-cleft, inferior; petals 5; fruit, a drupe, or a hard nut, or stone, encompassed by a fleshy pulpy substance, with 1 cell, closed at the top; nut with prominent seams.

Species.

330. PRU'NUS CE'RASUS V. S. 1.
Common Wild Cherry.

SP. CH. Umbels mostly on short fruit-stalks; leaves egg-spear-shaped, smooth, doubled together. *With.* 447. *E. B.* 706. *Abbot*, 359. *Robson*, 63.

Woods and hedges. April. Common. T.

331. PRU'NUS INSITI'TIA V. S. 2.
Bullace Plumb.

SP. CH. Fruit-stalks in pairs; leaves egg-shaped, slightly woolly, coiled; branches with thorns. *With* 448. *E. B.* 841. *Abbot*, 358. *Robson*, 63.

Hedges. April. Not common. T.

Eudon Burnel, near Bridgnorth, Shropshire. Badsey, Worcestershire.

332. PRU'NUS SPINO'SA 3.
Sloe-tree. Blackthorn.

SP. CH. Fruit-stalks single; leaves spear-shaped, smooth; branches thorny. *With.* 448. *E. B.* 842. *Abbot*, 361. *Robson*, 64.

Hedges. March. Common. T.

OBS.

Letters written upon linen or woollen, with the juice of the fruit, will not wash out. Sheep, goats, and horses eat the leaves. Withering.

333. PRU'NUS DOMES'TICA 4.
Common Plumb-tree.

SP. CH. Fruit-stalks mostly solitary; leaves spear-shaped, coiled; branches thornless. *Woodville*, 85. *With.* 447. *E. B.* 1783.

Hedges. April. Rare. T.

Badsey, Worcestershire.

OBS.

The cultivated garden plumbs are derived from

this species. The bark dyes yellow. The P. Cerasus is also the original stock from which many of the cultivated kinds of cherry are derived. Linn. With.

ORDER II.

DIGYNIA. Two pointals.

Genus 1.

CRATÆ'GUS. Hawthorn.

NAT. ORD. Pomaceæ

GEN. CH. Cup of 5 segments; petals 5; berry beneath, containing 1 or 2 seeds.

Species.

334. CRATÆ'GUS MONOGY'NA (*Abbot, 363.*) 1.
Common Hawthorn. May.

SP. CH. Leaves mostly 3-cleft; segments blunt, serrated; flowers with one pointal. *Syn. C. Oxyacantha. With. var. 2. 450. Robson, 64. Mespilus Oxyacantha. E. B. 2504.*

Woods, hedges. May. Common. T.

OBS.

I examined almost a whole hedge-row, and did not meet with more than two or three solitary blossoms with 2 pointals and a few with 3.

335. CRATÆ'GUS TORMINA'LIS 2.
Wild Service Tree.

SP. CH. Leaves heart-shaped, with 7 angles; lower-most lobes straddling, serrated. *With.* 449. *Syn.* *Pyrus torminalis.* *E. B.* 298. *C. torminalis.* *Robson,* 64.

Woods and hedges. May. Rare. T.

On the side of the foot-path to Mr. Petford's Alcester Park.

ORDER III.

TRIGYNIA. Three pointals.

Genus 1.

SOR'BUS. Service.

NAT. ORD. Pomaceæ.

GEN. CH. Cup 5-cleft; petals 5; berry beneath, containing 3 seeds.

Species.

336. SOR'BUS AUCUPA'RIA 1.
Mountain Ash. Quicken Tree.

SP. CH. Leaves winged, smooth on both sides.
Abbot, 364. *Robson,* 65. *With.* 451. *Syn.* *Pyrus acuparia.* *E. B.* 337.

OBS.

It grows wild at Faintree, near Bridgnorth, but I cannot strictly say that it is the case in Warwickshire.

ORDER IV.

PENTAGYNIA. Five pointals.

Genus 1.

PY'RUS. Pear.

NAT. ORD. Pomaceæ.

GEN. CH. Cup 5 segments; corol 5 petals; apple beneath, with 5 cells and many seeds.

Species.

337. PY'RUS MA'LUS 1.
Crab Apple. Wilding.

SP. CH. Leaves serrated; flowers in a simple umbel, sitting. *With.* 453. *E. B.* 179. *Abbot*, 366. *Robson*, 66.

Woods, hedges. April, May. Common. T.

338. PY'RUS COMMU'NIS 2.
Common Pear.

SP. CH. Leaves serrated; smooth; flowers forming a corymbus, or a flat topped spike. *With.* 453. *Abbot*, 365. *E. B.* 1784. *Robson*, 66.

Woods, hedges. May. Rare. T.

Great Alne. Kinwarton.

Genus 2.

SPIRÆ'A. Meadow-sweet.

NAT. ORD. Pomaceæ.

GEN. CH. Cup 5-cleft; petals 5; capsules 4 or more, with many seeds.

OBS.

The capsules are placed in a circle in the S. filipendula; in the S. Ulmaria they are numerous, and twisted like a cork-screw. Linn. Genera plantarum, p. 253.

Species.

339. SPIRÆA ULMA'RIA V. S. 1.
Common Meadow-sweet. Queen of the meadows.

SP. CH. Leaves interruptedly winged; leaflets ovate, doubly serrated, hoary underneath, flowers in tufts. *With.* 455. *E. B.* 960. *Abbot*, 368. *Robson*, 153.

Moist ditches, meadows and banks of rivers. Very common. June, July. P.

OBS.

The flowers infused in boiling water, give it a fine flavour, which rises in distillation. Sheep and swine eat it. Goats are extremely fond of it. Cows and horses refuse it. Linn. Withering.

340. SPIRÆA FILIPEN'DULA V. S. 2.
Dropwort Meadow-sweet.

SP. CH. Leaves interruptedly winged; leaflets strap-spear-shaped, irregularly serrated, very smooth;

flowers in tufts. *With.* 454. *E. B.* 284. *Abbot*, 367. *Robson*, 153.

Dry meadows and pastures. July. Rare. P.

Spernal. Arrow.

OBS.

The greater and smaller leaflets (being arranged along the midrib of the leaf in alternate order) at once point out this species. (Abbot.) The tuberous pea like roots, dried and reduced to powder, make a kind of bread, which, in times of scarcity, is not to be despised. Hogs are very fond of them. Linn. Withering.

ORDER V.

POLYGYNIA. Many pointals.

Genus 1.

POTENTIL'LA. Cinquefoil.

NAT. ORD. Senticosæ:

GEN. CH. Calyx 10-cleft; petals 5; seeds nearly round, naked, fixed to a small dry receptacle.

Species.

341. POTENTIL'LA REP'TANS . . . V. S. 1.
Common creeping Cinquefoil. Five-leaved Grass.

SP. CH. Leaves in fives; stem creeping; fruit-stalks with 1 flower. *Woodville*, 59. *With.* 465.
E. B. 862. *Abbot*, 379. *Robson*, 196.

Road sides and pastures. June. Common. P.

OBS.

The red cortical part of the root is mildly astringent and antiseptic. A decoction of it is a good gargle for loose teeth and spongy gums. Withering.

342. POTENTIL'LA ANSERI'NA. . . . V. S. 2.

Silver-weed Cinquefoil. Goose Tansey.

SP. CH. Leaves winged, serrated; stem creeping; fruit-stalks with 1 flower. *With.* 454. *E. B.*

861. *Abbot*, 377. *Robson*, 196.

Sides of paths and roads. July. Common. P.

Genus 2.

TORMENTIL'LA. Septfoil.

NAT. ORD. Senticosæ.

GEN. CH. Calyx 8-cleft; petals 4; seeds roundish, naked, fixed to a small juiceless receptacle.

Species.

343. TORMENTIL'LA OFFICINA'LIS . . . V. S. 1.

Common Tormentil or upright Septfoil.

SP. CH. Stem somewhat ascending; leaves sitting.

With. 467. *Woodville*, 9. *E. B.* 863. *Robson*, 195. *Syn. Potentilla Tormentilla. Abbot*, 381.

Woods and shady places. June. Common. P.

OBS.

Dr. Withering says that Tormentilla differs from Potentilla only in the number of parts, (calyx 8-cleft) that therefore they might very properly be united into one genus. The roots may rank with the strongest vegetable astringents. They are used in several countries to tan leather. Farmers find them very useful and efficacious in the dysenteries of cattle. They dye red. Cows, goats, sheep, and swine eat it. Linn. Withering.

Genus 3.

GE'UM. Avens.

NAT. ORD. Senticosæ.

GEN. CH. Cup 10-cleft; petals 5; seeds with a jointed awn.

Species.

344. GE'UM URBA'NUM V. S. 1.

Common Avens. Herb Bennet.

SP. CH. Flowers upright; fruit globular, woolly, awns hooked, bare; root leaves lyre-shaped; stem leaves in threes. *With.* 468. *Woodville*, 259. *E. B.* 1400. *Abbot*, 382. *Robson*, 197.

Woods and hedges. June. Common. P.

345. GE'UM RIVA'LE V. S. 2.

Water Avens.

SP. CH. Flowers nodding; fruit oblong; awns fea-

thered, twisted; petals blunt, roundish, wedge-shaped; leaves winged. *With.* 468. *Abbot*, 383. *E. B.* 106. *Robson.* 197.

Moist Woods and meadows. Very rare. May. P. Between Walsall and Aldridge, Staffordshire. *Ruford.* Maulbrook, near Walton, Shropshire. *Hall.*

Genus 4.

RU'BUS. Bramble.

NAT. ORD. Senticosæ.

GEN. CH. Cup 5-cleft; petals 5; berry composed of granulations, each containing 1 seed.

Species.

346. RU'BUS IDÆ'US 1.
Raspberry. Hindberry.

SP. CH. Leaves winged with 5 or 3 leaflets; stem prickly; leaf-stalks channelled. *With.* 468. *Woodville*, 138. *Abbot*, 372. *E. B.* 2442. *Robson*, 66.

Woods. May. Rare. S.

Woods about Allesley. *Bree.*

OBS.

The above is the only habitat, that I am authorized, at present, to put down. It is said to be common about Birmingham, in thickets and rough places near rivulets. Withering. See note 5.

347. RU'BUS FRUTICO'SUS V. S. 2.
Blackberry. Common Bramble.

SP. CH. Leaves quinate or 5-fingered, and ternate
or 3-fingered; stem and leaf-stalks prickly; pan-
icle oblong. *With.* 459. *Abbot*, 374. *E. B.*
715. *Park.* 1013. 1. *Robson*, 66.

Woods, hedges. June. Common. S.

OBS.

*The green twigs are of great use in dying wool-
len, silk, and mohair, black. Silk worms will
sometimes feed upon the leaves in defect of those of
the mulberry. Stokes. Withering.*

348. RU'BUS CORYLIFO'LIUS V. S. 3.
Hazel-leaved Bramble.

SP. CH. Leaves 3-fingered, and 5-fingered; prick-
les small; slightly bent, but not hooked. *E. B.*
827. *Syn. Rubus fruticosus Var. 2. With.*
460. *Park.* 1014. 2.

Hedges. Very common. July. S.

OBS.

*The principal distinction between this and the fru-
ticosus, is in the form and colour of the leaves; in the
stem of the latter being angular and deeply furrow-
ed, the stem of the former smooth and nearly round;
and in the size of the prickles. "The species and
varieties of rubus (says the Reviewer),* present*

* See Monthly Review, for June, 1816, page 130.

such approximations; that they cannot be easily discriminated." This is particularly the case with the *R. fruticosus*, *corylifolius*, and *cæsius*; for I have met with varieties of the *corylifolius*, where the stems of some were somewhat furrowed, and in others the lateral leaflets were slightly bi-lobed; but in the more perfect plant of each species, the marks of distinction are sufficiently obvious.

349. RU'BUS CÆ'SIUS 4.
Dewberry Bramble.

SP. CH. Leaves 3 together almost bare, side-leaflets with two lobes; stem round, prickly; panicle with few flowers. *With.* 459. *Abbot*, 373. *E. B.* 826. *Park.* 1014. 2. *Robson*, 66.

Open fields, woods and hedges. June, September.
Common. S.

OBS.

This bears more resemblance to the R. corylifolius; but the bi-lobed leaflets and the ternate order of the leaves will readily distinguish them.

Genus 5.

FRAGA'RIA. Strawberry.

NAT. ORD. Senticosæ.

GEN. CH. Calyx 10-cleft; petals 5; receptacle of the seeds ovate, like a berry, falling off.

Species.

350. FRAGA'RIA VES'CA V. S. 1.

Common Wood Strawberry.

SP. CH. Leaves 3 together; runners creeping. *With.*

462. *E. B.* 1524. *Abbot*, 375. *Robson*, 198.

Woods and hedge banks. May. Common. P.

351. FRAGA'RIA STE'RILIS V. S. 2.

Barren Strawberry.

SP. CH. Stem trailing; without creeping runners;

flowering branches loose. *With.* 463. *Abbot*,

376. *E. B.* 1785. *Robson*, 198.

Pastures, heaths, woods and hedge banks. April,

May. Common. P.

Genus 6.

RO'SA. Rose.

NAT. ORD. Senticosæ.

GEN. CH. Petals 5; cup urn-shaped, 5-cleft, fleshy, contracted at the neck, so as to form a coloured berry of 1 cell, opening at the top; seeds many, rough with hair, dispersed in the pulp, fixed to the inner side of the cup.

Species.

352. RO'SA SPINOSIS'SIMA V. S. 1.

Burnet Rose.

SP. CH. Germens and fruit-stalks smooth; stem and leaf-stalks fully set with straight prickles; leaflets circular, smooth, sessile or sitting. *With.* 456. *E. B.* 187. *Robson*, 66.

Hedges, heaths, sandy places. July. Common. S.

OBS.

*The juice of the ripe fruit diluted with water, dyes silk and muslin of a peach colour; and with the addition of alum, a deep violet, but it has very little effect on woollen or linen. Withering. Med. & Physic. Journal, vol. 16. p. 261.**

353. RO'SA CANI'NA V. S. 2.
Dog Rose. Hep Rose.

SP. CH. Germs and fruit-stalks smooth; stem and leaf-stalks prickly. *Woodville*, 139. *With.*

* "A catalogue of such British plants as have been found in any shape serviceable to man, whether in a medicinal, æconomical, culinary, or agricultural point of view, together with an account of the uses which they have been made to answer, and an accurate botanical description of each plant." See *Medical and Physical Journal*, by Dr. Bradley, &c. vol. 11. page 370.

I strongly recommend a perusal of the above, as every possible information has been collected from the various works of the most celebrated authors that have treated upon the different subjects, contained in the above notice.

458. *Abbot*, 370. *E. B.* 992. *Robson*, 65.
Hedges. July. Common. S.

OBS.

The pulp of the berries, beat up with sugar, makes the conserve of heps of the shops.

354. RO'SA ARVEN'SIS V. S. 3.
Corn Rose. White Rose.

SP. CH. Germs and fruit-stalks smooth; stem and leaf-stalks prickly; flowers in tufts. *With.*

455. *Abbot*, 371. *E. B.* 188. *Robson*, 65.

Hedges. June. Common. S.

OBS.

The flowers are more frequently solitary than in tufts. The chief characteristic or specific distinction is the column or pillar in the centre of the flower, which is made up of the pointals compacted together; and resembles a large single pointal, terminated by a capital or knob composed of the stigmas.

355. RO'SA RUBIGINO'SA V. S. 4.
Sweet Briar. Eglantine.

SP. CH. Germs round and prickly; fruit-stalks prickly at the base; prickles bent back; leaves

rust-coloured underneath. *With.* 457. *Abbot*, 369. *E. B.* 991. *Robson*, 65.

Woods, hedges, heaths. July. Not common. S. Alne Hills, above the village.

Genus 7.

CO'MARUM. Marshlocks.

NAT. ORD. Senticosæ.

GEN. CH. Calyx 10-cleft, permanent, segments alternately smaller; petals 5, less in dimensions than the segments of the calyx; seeds naked, smooth; receptacle globular, fleshy, woolly, permanent.

Species.

356. CO'MARUM PALUS'TRE V. S. 1.
Purple Marshlocks. Marsh Cinquefoil.

SP. CH. Leaves winged; petals smaller than the calyx. *With.* 470. *Abbot*, 384. *E. B.* 172. *Robson*, 198.

Muddy putrid marshes. Boggy places. June. Rare. P.

Bromsgrove Lickey, Worcestershire. Coleshill Bog, Warwickshire. About Stourbridge, Worcestershire. Common.

OBS.

The root dyes a dirty red. The calyx, petals,

stamens, styles and receptacles of a dark red purple, approaching to blackness. Withering.

CLASS XIII.

POLYANDRIA. Many stamens.

CL. CH. Stamens numerous, standing upon the receptacle.

OBS.

Here the number of stamens is the distinction, between this and the Dodecandria or 11th Class.

ORDER I.

MONOGYNIA. One pointal.

Genus 1.

PAPA'VER. Poppy.

NAT. ORD. Rhœadææ.

GEN. CH. Blossom of 4 petals; cup of 2 leaves; capsule 1-celled, opening by pores under a permanent stigma.

OBS.

The capsule is one-celled; often divided half way into many cells, which open by several apertures beneath the crown.

Species.

357. PAPA'VER RHÆ'AS V. S. 1.
Red or Corn Poppy.

SP. CH. Capsules smooth, round; stem hairy, many
flowered; leaves winged, jagged. *Woodville*,
186. *With.* 476. *Abbot*, 388. *E. B.* 645.
Robson, 97.

Cornfields. June. Common. A.

358. PAPA'VER SOMNI'FERUM V. S. 2.
Wild or White Poppy.

SP. CH. Calyx and capsules smooth; leaves embrac-
ing the stem, jagged. *Woodville*, 185. *With.*
478. *E. B.* 2145. *Robson*, 98.

Uncultivated gardens. Cornfields. Rare. A.

OBS.

*Opium is the inspissated juice of this plant. It
is cultivated in great quantities at Evesham, there-
fore I am not surprized to find a straggling plant
or two round this neighbourhood.*

359. PAPA'VER ARGEMO'NE V. S. 3.
Long prickly-headed Poppy.

SP. CH. Capsules club-shaped, bristly; stem leafy,
many flowered. *With.* 476. *Abbot*, 387. *E.*
B. 643. *Robson*, 97.

Cornfields. June. Not rare. A.

Genus 2.

NYMPHÆ'A. Water Lily.

NAT. ORD. Miscellaneæ.

GEN. CH. Corol of many petals; cup 4 or 5 leaves; stigma round, flat, sitting; berry superior, lopped, many-celled.

Species.

360. NYMPHÆ'A LUTE'A V. S. 1.
Yellow Water Lily or Water-can.

SP. CH. Leaves heart-shaped, very entire, lobes approaching; cup of 5 leaves, longer than the petals.
With. 478. *Abbot*, 392. *Robson*, 119. *Syn*
Nuphar lutea. *E. B.* 159.

Rivers and ponds. July. Common. P.

OBS.

Water-can is from the half unfolded leaves, floating on the water resembling cans.

361. NYMPHÆ'A AL'BA 2.
White Water Lily.

SP. CH. Leaves heart-shaped, very entire, lobes round, tiled; cup of 4 leaves. *With.* 479. *E.*
B. 160. *Abbot*, 393. *Robson*, 119.

Rivers, ponds. July. Rare. P.

In a pond at Ragley, Warwickshire. Ditches

about Oxford. *Rufford*. Snowdon Pool near
Bridgnorth. *Hall*.

Genus 3.

CHELIDO'NIUM. Celandine.

NAT. ORD. Rhoeadeæ.

GEN. CH. Corol of 4 petals; calyx 2 leaves; pod
1-celled, strap-shaped.

Species.

362. CHELIDO'NIUM MA'JUS V. S. 1.
Common Celandine.

SP. CH. Fruit-stalks forming umbels. *Woodville*,
263. *With.* 473. *Abbot*, 385. *E. B.* 1581.
Robson, 98.

Rubbish, hedges. June. Common. P.

Obs.

*The juice of every part of this plant is yellow
and very acrimonious; it is a common application
to warts. There is no doubt but a medicine of such
activity will one day be converted to more impor-
tant purposes. Withering.*

Genus 4.

CIS'TUS. Cistus.

NAT. ORD. Rotaceæ.

GEN. CH. Corol of 5 petals; cup 5 leaves, 2 of the
leaves smaller; fruit a capsule.

Species.

363. CIS'TUS HELIAN'THEMUM . . . V. S. 1.
Sunflower Cistus. Common dwarf Cistus.

SP. CH. Rather shrubby, trailing, leaf-scales spear-shaped; leaves oblong, hairy, opposite, edges turned back; flowers in bunches. *With.* 482. *Abbot*, 391. *E. B.* 1321. *Robson*, 117.

Hilly pastures and dry banks. July. Common. S.

OBS.

This is an elegant and beautiful plant; the blossom before it flowers is nodding.

Genus 5.

TIL'IA. Lime Tree.

NAT. ORD. Columniferae.

GEN. CH. Cup 5-clefts; petals 5; seed vessel leathery, globular, 5-celled, 5-valved, opening at the base.

Species.

364. TIL'IA EUROPÆA . . . V. S. 1.
Common Lime. Linden Tree.

SP. CH. Flowers without a honey-cup. *Abbot*, 390. *With.* 480. *E. B.* 610. *Park.* 1407. 2. *Robson*, 115.

Woods and hedges. July. Not rare. T.

OBS.

The bractæ or floral-leaves are the most striking objects in this tree, they are of a yellowish green and readily distinguished from the other leaves at some distance; they are as long as the fruit-stalk, and attached to it for about half its length. The wood is soft, light, and smooth; close grained, and not subject to the worm. It is used for leather cutter's boards, and for carved work. The flowers are fragrant, and afford the best honey for bees. The sap inspissated, affords a quantity of sugar. Withering.

ORDER III.*

TRIGYNIA. Three pointals.

Genus 1.

DELPHINIUM. Larkspur.

NAT. ORD. Multisiliquæ.

GEN. CH. Calyx none; petals 5; nectary or honey-cup cloven, horn-shaped behind.

Species.

365. DELPHINIUM CONSOLIDA . . . V. S. 1.
Common Larkspur.

* *Pæonia* is now naturalized and become a British plant; consequently (according to the present systematic arrangement) must remove *Delphinium* to the third, and *Aquilegia* to the fourth order. See note 3.

SP. CH. Nectary of 1 leaf ; stem subdivided. *Abbot*, 394. *With.* 484. *E. B.* 1839. *Robson*, 154.

Cornfields. June, September. Rare. A.

Studley in the Castle field.

OBS.

Although this plant was found in a wild state, I cannot strictly say that it is become naturalized to Warwickshire ; as it was found growing too near to the Castle gardens. "The expressed juice of the petals, with the addition of a little alum, makes a good blue ink. The seeds are acrid and poisonous." Withering.

ORDER IV.

PENTAGYNIA. Five pointals.

Genus 1.

AQUILE'GIA. Columbine.

NAT. ORD. Multisiliquæ.

GEN. CH. Cup none ; petals 5 ; nectaries 5, horn-shaped, alternating with the petals ; capsules 5, distinct.

Species.

366. AQUILE'GIA VULGA'RIS 1.
Common Columbine.

SP. CH. Nectaries bowed inwards, nearly equal to the petals; leaflets all on leaf-stalks, lobes distant, roundish, blunted. *With.* 485. *Abbot*, 395. *E. B.* 297. *Robson*, 154,

Woods and thickets. Rare. June. P.

Corley Woods, Warwickshire. *Bree*. Common in Monmouthshire.

OBS.

The beauty of its flowers has long introduced it, into our flower borders. Withering.

ORDER V.

POLYGYNIA. Many pointals.

Genus 1.

ANEMO'NE. Anemone.

NAT. ORD. Multisiliquæ.

GEN. CH. Calyx none; petals 6; capsules many, with awns or tails, formed by the style.

Species.

367. ANEMO'NE NEMORO'SA V. S. 1.
Wood Anemone.

SP. CH. Seeds pointed; leaflets snipt; stem with 1 flower. *With.* 488. *Abbot*, 397. *E. B.* 355. *Robson*, 202.

Woods, hedges, and hollow-ways. Common.

April. P.

OBS.

The whole plant is acrid. When it is eaten by sheep that are unaccustomed to it, it brings on a bloody flux. With. Med. & Phys. Journal, vol. 17. p. 372.

Genus 2.

CAL'THA. Marsh Marigold.

NAT. ORD. Multisiliquæ.

GEN. CH. Calyx none; petals 5; honey-cups none; capsules several, with many seeds.

Species.

368. CAL'THA PALUS'TRIS V. S. 1.
Marsh Marigold. Meadow-bouts.

SP. CH. ——— Abbot, 415. With. 501. E. B.
506. Robson, 155. Park. 1213. 1.

Wet ditches and meadows, banks of rivers and pools.
April, May. Common. P.

OBS.

The flowers gathered before they expand, and preserved in salted vinegar, are a good substitute for capers. The juice of the petals boiled with a

little alum, stains paper yellow. Cows will not eat it, unless compelled by extreme hunger, and then (Boerhaave says,) it occasions such an inflammation, that they generally die. Withering. Med. & Phys. Journal, vol. 17. page 465.

Genus 3.

RANUN' CULUS. Crow-foot.

NAT. ORD. Multisiliquæ

GEN. CH. Calyx of 5 leaves; petals 5, with a honey-cup scale or pore within the claws; seeds naked.

Obs.

Many of the plants of this class appear to be strictly united by one natural bond, under the name of Multisiliquæ, or many podded; having a fruit composed of several capsules joined together. The nectaries or honey-cups form the principal distinction of the genera; which is particularly exemplified in the genus ranunculus.

Species.

369. RANUN' CULUS SCELERA' TUS . . . V. S. 1.
Celery-leaved Crow-foot.

SP. CH. Lower leaves palmate or hand-shaped, upper ones fingered; fruit oblong. *With.* 495. *Abbot*, 405. *E. B.* 681. *Robson*, 199.

Pools and wet places. June. Common. A.

OBS.

The whole plant is very corrosive ; and beggars are said to use it to ulcerate their feet, which they expose in that state, to excite compassion. Goats eat it. Cows, horses and sheep refuse it. Withering

370 RANUN'CULUS BULBO'SUS V. S. 2.
Bulbous Crow-foot.

SP. CH. Root bulbous ; calyx reflected ; fruit-stalks grooved ; stem erect, many flowered ; leaves compound. *With.* 498. *Abbot*, 406. *E. B.* 515. *Robson*, 200.

Pastures. May. Common. P.

OBS.

Root globular but compressed, fibrous at the base ; like a turnip in miniature.

371. RANUN'CULUS RE'PENS V. S. 3.
Creeping Crow-foot.

SP. CH. Cup expanding, fruit-stalks grooved ; suckers creeping ; leaves compound. *With.* 499. *Abbot*, 408. *E. B.* 516. *Robson*, 200.

Wet meadows and ditches, June, Common. P.

372. RANUN'CULUS A'CRIS V. S. 4.
Upright Crow-foot. Butter-cups.

SP. CH. Cup open or expanding ; fruit-stalks round ;

leaves with 3 divisions, and many clefts, the uppermost strap-shaped. *Woodville*, 246. *With.* 496. *E. B.* 652. *Abbot*, 409. *Robson*, 200.

Meadows and pastures. June. Common. P.

OBS.

The great acrimony of this, and many of the other species of ranunculus, is such, that on being applied to the skin they excite itching, redness, and inflammation, and even produce blisters, tumefaction, and ulceration of the part. It has been employed as a vesicatory, and is said to have the advantage of a common blistering plaister, in producing a quicker effect, and never causing strangury. In such complaints as require a long continued topical stimulus, or discharge from the part, in the way of an issue, in various cases it has been found to be a powerful remedy. The manner of using the plant is to bruise it in a mortar, and to apply it to the skin as a poultice or plaister. Woodville.

373. RANUNCULUS ARVEN'SIS . . . V. S. 5.

Corn Crow-foot.

SP. CH. Seeds prickly; upper leaves doubly compound, strap-shaped. *With.* 499. *Abbot*, 410. *E. B.* 135. *Park.* 1216. 8. *Robson*, 200.

Cornfields. May. Common. A.

OBS.

It has lately been said that cows, horses and sheep in Italy eat it greedily, though it is so acrid as to poison the latter. Three ounces of the juice killed a dog in four minutes. Its growing chiefly, if not solely, in cornfields, where cattle are excluded, may possibly be the reason why we have not heard of mischief being done by it in this country. Withering.

374. RANUNCULUS AURI'COMUS . . . V.S. 6.

Wood Crow-foot. Goldilocks Crow-foot.

SP. CH. Root leaves kidney-shaped, scalloped, cut; stem leaves fingered, strap-shaped; stem with many flowers. *With.* 595. *Abbot*, 404, *E. B.* 624. *Robson*, 199.

Woods. Thickets. April. Common. P.

375. RANUNCULUS PARVIFLO'RUS . . . V.S. 7.

Small-flowered Crow-foot.

SP. CH. Seeds rough with tubercles, ending in hooked points; leaves heart-shaped, hairy, lobed or toothed; stem prostrate. *With.* 496. *Abbot*, 411. *E. B.* 120. *Robson*, 200.

Road-sides, on gravelly ditch banks. May, June.
Not rare. A.

OBS.

The whole plant trailing close on the ground.

The leaves are extremely soft and velvety, which added to the rough prickly seeds will at once distinguish it.

376. RANUNCU'LUS FICA'RIA . . . V. S. 8.
Pilewort.

SP. CH. Stem with 1 flower; leaves heart-shaped, angular, on leaf-stalks; petals 8; calyx with 3 leaves. *With.* 493. *Abbot*, 403. *E. B.* 584. *Park* 617. 3. *Robson*, 201.

Meadows, pastures, moist ditch banks. April.
Common. P.

OBS.

Honey-cup scale notched. It is the presence of the necturiferous gland that places this plant with the genus ranunculus.

377. RANUN'CULUS FLAM'MULA. . . V. S. 9.
Lesser Spearwort.

SP. CH. Leaves ovate spear-shaped, on leaf-stalks; stem declining. *With.* 493. *Abbot*, 401. *E. B.* 387. *Robson*, 199.

Boggy heaths, wet ditches. Not very rare. June, September. P.

378. RANUN'CULUS HEDERA'CEUS . . V. S. 10.
Ivy-leaved Crow-foot.

SP. CH. Leaves nearly round, of 3 lobes, very entire; stem creeping. *With.* 495. *Abbot*, 412. *E. B.* 2003. *Robson*, 200.

Boggy places. On the mud of slow shallow rivulets. Common. P.

OBS.

Here again the honey-cup gland (the sure mark of the crow-foot) determines the plant. The leaves are shining and succulent. Petals white.

379. RANUN'CULUS HETEROPHYLL'US . V. S. 11.
Various-leaved Water Crow-foot.

SP. CH. Leaves under the water hair-like, those above with central fruit-stalks. *Abbot*, 413. *Syn. R. Aquatilis. With.* 497. *E. B.* 101. *Robson*, 200.

Pools. May. Common. P.

380. RANUN'CULUS FLUVIAT'ILIS . . V. S. 12.
River Crow-foot.

SP. CH. All the leaves hair-like. *Abbot*, 414. *Syn. R. Aquatilis. With.* 497. *Var.* 5. *E. B.* 101. *Park.* 1256. 5.

Pools and rivers. June. Not very rare. P.

OBS.

The essential character of this genus consists in the honey-cup gland; the other parts of the flower

are inconstant. This nectary is in some species a naked pore; in others, encompassed by a cylindrical border; and in others again, it is closed by a scale which is notched at the end.

Genus 4.

HELLEB'ORUS. Hellebore.

NAT. ORD. Multisiliquæ.

GEN. CH. Calyx none; petals 5 or more; honey-cups 2-lipped, tubular; capsules with many seeds, rather erect.

Species.

381. HELLEB'ORUS VIR'IDIS V. S. 1.
Green Hellebore.

SP. CH. Stem cloven; branches leafy, with 2 flowers; leaves finger-like. *With.* 500. *Abbot*, 416
E. B. 200. *Robson*, 154.

Pastures and woods in a chalky soil. February.
Rare. P.

In a field near Studley Castle.

OBS.

Flowers nodding, green; petals pointed, permanent.

382. HELLEB'ORUS FŒT'IDUS V. S. 2.
Stinking Hellebore; or Bear's-foot.

SP. CH. Stem with many flowers, leafy; leaves bird-footed. *Woodville*, 19. *With.* 500. *Abbot*, 417. *E. B.* 613. *Robson*, 154.

Thickets, meadows, shady places, and hedges. March. Rare. P.

Studley Castle. Dunnington. Arrow.

OBS.

The smell of the recent plant is extremely fætid and the taste bitter, and remarkably acrid, inso- much, *that when chewed it excoriates the mouth and fauces; it commonly operates as a cathartic, some-* times as an emetic, and in large doses proves highly deleterious. The dried leaves, the only part noticed by the College, have been long domes- tically employed in this country, for their vermi- fuge effects, but they must be used cautiously, as many instances of their fatal effects are recorded. *Woodville. Withering.*

Genus 5.

CLE'MATIS. Traveller's Joy.

NAT. ORD. Multisiliquæ

GEN. CH. Calyx none, petals 4 to 6; seeds with a tail.

Species.

383. CLE'MATIS VITAL'BA V. S. 1.
Traveller's Joy. Honesty. Virgin's Bower.

SP. CH. Leaves winged; leaflets heart-shaped, climbing. *With.* 490. *Abbot*, 399. *E. B.* 612. *Robson*, 201. *Park.* 383. 1.

Hedges. July. Common. S.

Genus 6.

LIRIODEN'DRON. Tulip-tree.

NAT. ORD. Coadunatae.

384. LIRIODEN'DRON TULIPIF'ERA 1.
The Tulip-tree.

SP. CH. Calyx of 3 leaves, reflected; petals 6, bell-shaped.

Obs.

I have introduced this beautiful exotic, as I believe it to be very rare. It may be seen at the Free-school in this place. It is as large as a good sized oak, and was planted 25 years before any blossoms made their appearance. There is also a fine tree in the vicarage garden at Kidderminster. Rev. Francis Homfray. See note 5.

Genus 7.

THALIC'TRUM. Meadow Rue.

NAT. ORD. Multisiliquæ.

GEN. CH. Calyx none, petals 4 or 5, capsules many, rather beaked; seeds without a tail.

Species.

385. THALIC'TRUM FLA'VUM . . . V.S. 1.

Common Meadow Rue. Rue Weed.

SP. CH. Stem furrowed, leafy; panicle of many divisions, upright. *Abbot*, 400. *With.* 490. *E. B. B.* 367. *Robson*, 202. *Park.* 264. 1.

Wet meadows, banks of rivers. June. Rare. P.
Banks of the Avon at Bidford. The Arrow near
Beauchamps Court.

OBS.

The leaves are singularly beautiful; winged, triply 3-leaved, leaflets acute, 3-cleft; the lower irregular, sometimes wedge-shaped, with 3 clefts; sometimes oval, entire, or with a lobe on one side; flowers numerous, close and thick, of a yellowish white. The root a full yellow. Dyes wool yellow. Linn. Withering.

CLASS XIV.

DIDYNAMIA. Two Powers.

OBS.

This term signifies the power or superiority of two.

CL. CH. Four stamens in the flower, two higher than the others.

ORDER I.

GYMNOSPERMIA. Seeds naked.

Genus 1.

GLECO'MA. Ground-ivy.

NAT. ORD. Verticillatæ.

GEN. CH. Calyx 5-cleft; anthers in pairs, each pair forming a cross, one above the other.

Species.

386. GLECO'MA HEDERA'CEA V. S. 1.

Common Ground-ivy. Gill. Ale-hoof.

SP. CH. Leaves kidney-shaped, scollopèd. *Woodville*, 28. *With.* 515. *Abbot*, 427. *Robson*, 186. *Park.* 677. *E. B.* 853.

Groves, hedge-banks and shady places. April.
Common. P.

OBS.

The leaves thrown into the vat with ale, clarify it and give it a flavour. Ale thus prepared is often drank as an antiscorbutic. Withering. The old books record its great medical qualities; its name however is omitted in the catalogue of the Materia Medica by the London College.

Genus 2.

LA'MIUM. Archangel.

NAT. ORD. Verticillatæ.

GEN. CH. Upper lip of the blossom entire, arched; lower lip with 2 lobes; the mouth with a marginal tooth on each side.

Species.

387. LA'MIUM ALBUM V. S. 1.
White Archangel Nettle. White Dead Nettle.

SP. CH. Leaves heart-shaped, tapering to a point, serrated, on leaf-stalks; about 20 flowers in a whirl. *With.* 516. *Abbot*, 428. *E. B.* 768. *Robson*, 183.

Hedges and ditch-banks. April. Common. P.

388. LA'MIUM PURPUREUM V. S. 2.
Red Archangel or Dead Nettle. Dee Nettle.

SP. CH. Leaves heart-shaped, blunt, on leaf-stalks. *With* 516. *Abbot*, 429. *E. B.* 769. *Robson*, 183.

Rubbish, cornfields, and kitchen gardens. April, September. Common. A.

389. LA'MIUM AMPLEXICAULE V. S. 3.
Henbit Archangel or Dead Nettle.

SP. CH. Floral leaves sitting, embracing the stem,

blunt. *With.* 517. *Abbot*, 430. *E. B.* 770.
Park. 762. 2. *Excellent.* *Robson*, 183.

Walls, sandy cornfields. Not rare. May. A.

Genus 3.

A'JUGA. Bugle.

NAT. ORD. Verticillatæ.

GEN. CH. Upper lip of the blossom very small ;
 stamens longer than the upper lip.

Species.

390. A'JUGA REP'TANS V. S. 1.
 Common Bugle.

SP. CH. Plant smooth, with creeping suckers; leaves
 ovate, scalloped. *With.* 506. *E. B.* 489. *Ab-*
bot, 418. *Robson*, 188.

Woods, meadows and moist pastures. May. Com-
 mon. P.

OBS.

*There are varieties of blue and white blossoms ;
 the former is the most common.*

Genus 4.

STA'CHYS. Woundwort.

NAT. ORD. Verticillatæ.

GEN. CH. Upper lip of the blossom arched, lower

one bent back at the sides, intermediate segment greater and nicked; stamens after flowering bent towards the sides.

Species.

391. STA'CHYS SYLVAT'ICA V. S. 1.
Hedge Nettle Woundwort.

SP. CH. Six flowers in a whirl; leaves heart-shaped, on leaf-stalks. *With.* 520. *E. B.* 416. *Abbot*, 435. *Robson*, 184.

Hedges and woods. July. Common. P.

OBS.

The whole plant has a fætid smell. It will dye yellow; and there can be little doubt, that it may be converted to the same purposes as hemp and flax, with many others of this Class.

392. STA'CHYS PALUS'TRIS V. S. 2.
Marsh Woundwort. Clown's All-heal.

SP. CH. Six flowers in a whirl; leaves strap-spear-shaped, half embracing the stem and sitting. *With.* 521. *E. B.* 1675. *Abbot*, 436. *Robson*, 184. *Park.* 852.

Wet ditches, banks of rivers. July. Common. P.

Genus 5.

BETON'ICA. Betony.*

NAT. ORD. Verticillatæ.

GEN. CH. Cup awned ; upper lip of the blossom ascending, flattish, tube cylindrical.

Species.

393. BETON'ICA OFFICINA'LIS . . . V. S. 1.
Wood Betony.

SP. CH. Spike interrupted; the intermediate segments of the lip of the corol nicked. *With.* 520.
E. B. 1142. *Abbot*, 434. *Robson*, 185. *Park.*
614. 1. *Woodville*, 244.

Woods. July. Common. P.

OBS.

This plant is not destitute of virtues, for when fresh it intoxicates ; and the dried leaves excite sneezing. It is often smoaked as tobacco ; both this plant and eyebright enter into the composition of Rowley's British herb tobacco and snuff. Antonius Musa, physician to the Emperor Augustus, states it as a remedy for no less than 47 disorders ; and hence the proverbial compliment, "you have more virtues than betony." Woodville.

Genus 6.

TEU'CRUM. Germander.

NAT. ORD. Verticillatæ.

GEN. CH. Blossom without an upper lip, divided

beyond the base, straddling where the stamens are.

Species.

394. TEU'CRIUM SCORODO'NIA . . . V. S. 1.
Wood Sage. Sage Germander.

SP. CH. Leaves heart-shaped, serrated, on leaf-stalks; flowers in lateral bunches, pointing one way; stem erect. *With.* 508. *E. B.* 1543. *Abbot*, 420. *Robson*, 189. *Park.* 111. 2.

Woods, heaths, and ditch banks in a sandy soil.
July. Common. P.

Pophills Lane. About Pitchell. Ragley Woods,
&c.

OBS.

It possesses the bitterness and a good deal of the flavour of hops; but upon trial it gives too much colour to the liquor. Withering.

Genus 7.

MARRU'BIUM. Horehound.

NAT. ORD. Verticillatæ.

GEN. CH. Cup salver-shaped, stiff, with 10 scores; upper lip of the blossom with 2 segments, strap-shaped, straight.

Species.

395. MARRU'BIUM VULGA'RE . . . V. S. 1.
Common White Horehound.

SP. CH. Teeth of the calyx bristle-shaped; hooked.
Woodville, 97. *With.* 523. *E. B.* 410. *Abbot*,
 438. *Robson*, 185. *Park.* 44.

Road sides. July. Rare. P.

On the side of the turnpike road near to Alces-
 ter Lodge.

OBS.

*A tea prepared from it, sweetened with honey,
 is an excellent domestic medicine in coughs and
 obstructions of the lungs.*

Genus 8.

BALLO'TA. Henbit.

NAT. ORD. Verticillatæ.

GEN. CH. Cup salver-shaped, with 5 teeth and 10
 scores; upper lip of the corol, scolloped, concave.

Species.

396. BALLO'TA NI'GRA V. S. 1.
 Stinking Henbit. Black-horehound.

SP. CH. Leaves heart-shaped, entire, serrated;
 cups pointed. *Abbot*, 437. *With.* 522. *E. B.*
 46. *Robson*, 185.

On rubbish, hedges. July. Common. P.

Var. Flore albo, or with a white blossom, not so
 common.

OBS.

Both varieties grow together, according in every

respect but colour; the stem and leaves of the latter are also of a whitish colour. It stands recommended in hysterical cases. The Swedes reckon it almost a universal remedy in the diseases of their cattle. Horses, cows, sheep, and goats refuse it. *Linn. Withering.*

Genus 9.

MEN'THA. Mint.

NAT. ORD. Verticillatæ.

GEN. CH. Blossom nearly equal, 4-cleft, the broader segments emarginate or notched at the end; stamens erect, distant.

Species.

397. MEN'THA AQUAT'ICA V. S. 1.
Water Mint.

SP. CH. Leaves egg-shaped, serrated, on leaf-stalks; stamens longer than the blossom. *With.* 512.
Abbot, 425. *Robson*, 187. *Park*. 1243.

Watery places and banks of rivers. August. Rare.
P.

Coughton Mill. Oversley Bridge.

398. MEN'THA HIRSU'TA V. S. 2.
Rough Water Mint.

SP. CH. Flowers in heads; leaves ovate, serrated, nearly sitting, downy; threads longer than the blossom. *Abbot*, 424. *With.* 511. *E. B.* 447.

Watery places. August. Common. P.

399. MEN'THA ARVEN'SIS V. S. 3.
Corn Mint.

SP. CH. Flowers in whirls; leaves ovate, pointed, serrated; stamens as long as the corol; stems spreading. *With.* 513. *E. B.* 2119. *Abbot*, 426. *Robson*, 188. *Park.* 37. 5.

Watery places and moist cornfields. July. Common. P.

400. MEN'THA GENTI'LIS V. S. 4.
Red Mint.

SP. CH. Leaves ovate, acute, serrated; flowers in whirls; stamens shorter than the blossom. *With.* 513. *E. B.* 449.

Watery places and sides of rivulets. Rare. July. P.

Side of the River Alne. Oversley, near the Bridge.

401. MEN'THA PIPERI'TA 5.
Pepper-mint.

SP. CH. Flowers in heads; leaves egg-shaped, on leaf-stalks; stamens shorter than the blossom. *Woodville*, 169. *With.* 512. *E. B.* 687. *Robson*, 187.

Watery places and sides of rivulets. August. Rather rare. P.

Near Coughton Mill. Side of the Alne River.

Genus 10.

GALEOP'SIS. Nettle Hemp.

NAT. ORD. Verticillatæ.

GEN. CH. Upper lip of the corol arched, somewhat scolloped; lower lip 3-cleft; mouth with a concave taper-pointed tooth on each side.

Species.

402. GALEOP'SIS TE'TRAHIT V. S. 1.
Nettle Hemp.

SP. CH. Upper whirls near together; stem swollen below the joints; calyx teeth very long, bristle-shaped, equal, somewhat pungent. *With.* 518. *E. B.* 207. *Abbot*, 432. *Robson*, 183.

Hedge banks, borders of cornfields. July. Common. A.

403. GALEOP'SIS LA'DANUM V. S. 2.
Narrow-leaved Nettle Hemp. Ironwort.

SP. CH. All the whirls remote; calyces bell-shaped, pubescent, teeth strap-bristle-shaped, diverging, not pungent; stems of an equal thickness between each joint. *With.* 517. *E. B.* 884. *Abbot*, 431. *Robson*, 183.

Cornfields in a calcareous soil. June. Frequent. A.

Genus 11.

GALEOB'DOLON. Weasel-snout.

NAT. ORD. Verticillatæ.

GEN. CH. Upper lip of the blossom entire, arched; lower lip cloven into three, without the concave teeth; segments broad, pointed; anthers fleshy on the back.

Species.

404. GALEOB'DOLON LU'TEUM . . . V. S. 1.
Yellow Archangel Nettle.

SP. CH. Whirls with 6 flowers; involucre or fence of 4 leaves. *With.* 519. *Abbot*, 433. *E. B.* 787. *Syn. Galeopsis Galeobdolon. Linn.* and *Robson*, 184. 3.

Woods, thickets. Not very rare. May. P.
About Oversley, Rosall, &c.

OBS.

The beauties of this elegant plant, will pay the young botanist for the trouble of examination; it has much the air of the Lamium album or white Archangel Nettle.

Genus 12.

NEP'ETA. Cat.mint.

NAT. ORD. Verticillatæ.

GEN. CH. Middlemost segment of the lower lip of the corol, crenate or scolloped; mouth, the edges reflected; stamens approaching.

Species.

405. NEP'ETA CATA'RIA V. S. 1.

Common Nep, or Cat-mint.

SP. CH. Flowers in spikes ; whirls on short fruit-stalks ; leaves petiolate, or on leaf-stalks, cordate or heart-shaped ; tooth serrated. *With.* 508.

E. B. 137. *Abbot*, 422. *Robson*, 185.

Pastures and hedges, in a calcareous soil. July.
Rare. P.

Oversley, by the side of the Turnpike Road. On hedge-banks in Mr. Edkins's fields.

OBS.

Cats are delighted with this plant; but Mr. Millar says, that cats will not meddle with it, if it is raised from seeds; and in support of this opinion, quotes an old saying; "If you set it the cats will eat it; if you sow it, the cats will not know it. Withering.

Genus 13.

THY'MUS. Thyme.

NAT. ORD. Verticillatæ.

GEN. CH. Calyx or cup, bilabiate or 2-lipped; mouth closed with soft hairs.

Species.

406. THY'MUS SERPYL'LUM V. S. 1.

Common Wild or Mother of Thyme.

SP. CH. Flowers in heads; stems creeping; leaves blunt, flat, fringed at the base. *Woodville*, 110. *With.* 525. *Abbot*, 442. *F. B.* 1514. *Robson*, 190.

Dry heaths, mole hills. July. Common. B.

OBS.

The whole plant is fragrant, and yields an essential oil that is very healing. An infusion of the leaves removes the head-ache occasioned by the debauch of a preceding evening; and is also reputed to be an infallible cure for the night-mare. The attachment of bees to this and other aromatic plants is well known. That the mutton of sheep feeding on aromatic plants is superior in flavour to common mutton is an erroneous opinion. Sheep are not fond of aromatic plants; they will carefully push aside the thyme to get at the grass growing beneath it. Bowles. See Withering.*

407. THY'MUS A'CINOS V. S. 2.
Basil Thyme.

SP. CH. Flowers in whirles, 1 upon each fruit-stalk; stems upright, somewhat branched; leaves pointed serrated; calyx bulging at the base. *With.* 527. *Abbot*, 443. *Robson*, 190. *E. B.* 411.

Dry pastures and hills, in a calcareous soil. July, September. Rare. A.

* See Medical and Physical Journal, vol. 17. p. 566.

OBS.

The bulging of the calyx at the fore-part, appears to me so characteristic, that I have made it a part of the specific character.

Grafton and Rolls Wood Fields.

Genus 14.

PRUNEL'LA. Self-heal.

NAT. ORD. Verticillatæ.

GEN. CH. Filaments or threads with 2 forks, one point supporting the anthers; stigma cloven.

Species.

408. PRUNEL'LA VULGA'RIS V. S. 1.
Common Self-heal.

SP. CH. All the leaves ovate, oblong, serrated, on leaf-stalks; upper lip of the calyx lopped, with 3 clefts. *With.* 530. *E. B.* 961. *Park.* 1680. 1. *Abbot,* 445. *Robson,* 191.

Meadows and pastures. July. Common. P.

OBS.

Blossom generally blue or purplish, but sometimes white.

Genus 15.

CLINOPO'DIUM. Basil.

NAT. ORD. Verticillatæ.

GEN. CH. Involucrum or fence of many bristles, placed under the whirl.

Species.

409. CLINOPO'DIUM VULGA'RE . . . V.S. 1.
Wild Basil.

SP. CH. Heads roundish, rough with hair; floral leaves bristle-shaped. *Abbot*, 440. *With.* 524. *E. B.* 1401. *Robson*, 190.

Dry pastures, sides of hedges. July. Common.
P.

OB3.

The involucrum or the bristle-shaped floral leaves will at once distinguish this very common but not inelegant plant.

Genus 16.

SCUTELLA'RIA. Skull-cap.

NAT. ORD. Verticillatæ.

GEN. CH. Rim of the calyx nearly entire, closed after flowering, covered with a lid.

Species.

410. SCUTELLA'RIA GALERICULA'TA . . V.S. 1.
Common Skull-cap.

SP. CH. Leaves heart-spear-shaped, scalloped; flowers axillary, or from the bosom of the leaves. *With.* 529. *E. B.* 523. *Abbot*, 446. *Robson*, 191.

Banks of rivers and edges of ponds. July. Rare.
P.

Sides of the Arrow and River Alne.

OBS.

This plant is abundantly distinguishable from all others of its tribe, by its singular and beautiful empalement or calyx; which inclosing the seeds as a seed-vessel, resembles in its external appearance, a helmet with its crest.

411. SCUTELLA'RIA MI'NOR V. S. 2.
Lesser Skull-cap.

SP. CH. Leaves heart-egg-shaped, nearly entire; flowers axillary. *With.* 530. *E. B.* 524. *Robson*, 191.

Boggy ground and edges of ponds. July. Rare.
P.

Bogs. Sutton Coldfield. *Rufford*.

Genus 17.

MELIS'SA. Calamint.

NAT. ORD. Verticillatæ.

GEN. CH. Calyx dry, somewhat flat above; upper lip nearly flat-topped; upper lip of the corol somewhat arched, cloven; middle segment of the lower, cordate or heart-shaped. *Woodville*.

Species.

412. MELIS'SA CALAMIN'THA . . . V. S. 1.
Field Calamint. Calamint Baum.

SP. CH. Fruit-stalks from the bosom of the leaves,
forked, as long as the leaves. *With.* 528. *Ab-*
bot, 444. *Robson*, 190. *Syn. Thymus Cala-*
mintha. *E. B.* 1676.

Sides of roads and cornfields, on dry hedge-banks.
August. Not very rare. A.

Pophills Lane. Wixford, &c.

OBS.

This is a very fragrant and aromatic herb.

Genus 18.

LEONU'RUS. Motherwort. Lion's-tail.

NAT. ORD. Verticillatæ.

GEN. CH. Anthers sprinkled with shining particles.

Species.

413. LEONU'RUS CARDI'ACA . . . V. S. 1.
Motherwort.

SP. CH. Stem-leaves with 3 lobes, spear-shaped.
With. 523. *Abbot*, 439. *E. B.* 286. *Robson*,
186. *Park.* 42. 7.

Road-sides and waste places. June, August. Very
rare. P.

Kings Coughton, Warwickshire. Near Malvern,
Worcestershire. Between Ledbury and Ross,
Herefordshire.

ORDER II.

ANGIOSPERMIA. Seeds covered.

Genus 1.

RHINAN'THUS. Rattle.

NAT. ORD. Personatæ.

GEN. CH. Calyx ventricose or inflated, 4-cleft;
capsule with 2 cells, blunt, compressed, with few
seeds.

Species.

414. RHINAN'THUS CRISTA GALLI . . . V. S. 1.
Yellow Rattle. Yellow Cockscomb.

SP. CH. Upper lip of the corol, compressed, and
shorter. *With.* 532. *Abbot*, 447. *E. B.* 657.
Robson, 86.

Meadows and pastures. June, July. Common. A.

OBS.

*It makes a crashing and rattling noise under the
scythe; hence its name.*

Genus 2.

ANTIRRHI'NUM. Snapdragon.

NAT. ORD. Personatæ.

GEN. CH. Calyx of 5 leaves; corol either bulging at the base, or ending in a spur, with a honey-like liquor; capsule with 2 cells.

Species.

415. ANTIRRHI'NUM LINA'RIA . . . V. S. 1.
Common Toad-flax or Snapdragon.

SP. CH. Leaves spear-strap-shaped, crowded; stem erect, spikes terminal, sitting; flowers tiled. *Woodville*, 221. *With.* 541. *E. B.* 658. *Robson*, 88. *Abbot*, 460.

Road sides, hedge banks. August. Common. P.

Var. 2. Peloria. Blossoms regular, with 5 equal stamens and 5 nectaries. *With. var. 4.* 541. *E. B.* 260.

Badsey. *Rufford*.

OBS.

The leaves of Linaria have a bitterish and somewhat saline taste, and when rubbed betwixt the fingers yield a faint smell, resembling that of elder. They are reported to be diuretic and cathartic, and in both characters to act so powerfully as to give names to this plant expressive of these qualities. But the plant has been chiefly valued for its effects when externally applied, especially in hæmorrhoidal affections, for which both the leaves and flowers have been employed in the various forms of ointment, fomentation, and cataplasm. An infusion of the flowers is said to be very efficacious in cuta-

neous disorders; there is an instance recorded, in which these flowers, with those of *verbascum*, used as tea, cured an exanthematous disorder, which had resisted various other remedies tried during the course of three years. *Woodville*. The expressed juice mixed with milk, is a poison to flies, as is likewise the smell of the flowers. Cows, horses, and swine refuse it. Sheep and goats are not fond of it. *Withering*. See *Med. and Phys. Journal*, vol. 18. p. 171.

416. ANTIRRHI'NUM ELAT'INE . . . V. S. 2.
Sharp-pointed Fluellin or Snapdragon.

SP. CH. Leaves halberd-shaped, alternate; stems trailing. *With.* 539. *E. B.* 692. *Abbot*, 456. *Robson*, 88.

Cornfields. July, August. Not very rare. A.
Grafton. Kinwarton. Cleve.

Obs.

This is considerably more bitter than the other species of it; and it is said to have been used successfully in cases of foul ulcers, and in cutaneous eruptions. Withering. And see Med. and Phys. Journal. vol. 18. p. 171.

417. ANTIRRHI'NUM SPU'RIMUM . . . V. S. 3.
Round-leaved Fluellin.

SP. CH. Leaves egg-shaped, woolly; stems trailing. *With.* 539. *Abbot*, 457. *E. B.* 691. *Robson*, 88.

Cornfields. July, August, September. Rather rare. A.

Grafton, Warwickshire. Cleve and Littleton, Worcestershire.

OBS.

When this plant is first gathered, the corol is beautiful; the upper jaw yellow, the lower a bright purple. I should think, this plant is not inferior in its medical qualities, to the preceding species; they are generally found growing together.

418. ANTIRRHI'NUM MA'JUS V.S. 4.

Great Snapdragon or Calfsnout.

SP. CH. Corol without a spur; flowers in spikes; cups rounded. *With* 542. *E. B.* 129. *Abbot*, 459. *Robson*, 89.

On old walls and chalky rocks. July. Rare. B.
Salford, Warwickshire. Littleton, Worcestershire.

419. ANTIRRHI'NUM CYMBALA'RIA 5.

Ivy-leaved Snapdragon.

SP. CH. Leaves heart-shaped, with 5 lobes, alternate; stems trailing. *With*. 538. *E. B.* 502. *Abbot*, 455. *Robson*, 88.

Old walls. June. Rare. P.

Abbey Walls, Great Malvern, Worcestershire.

OBS.

A very elegant plant. It is now cultivated for its beauty in almost every house.

Genus 3.

EUPHRA'SIA. Eye-bright.

NAT. ORD. Personatæ.

GEN. CH. Calyx 4-cleft, cylindrical; capsule 2 cells, ovate-oblong; anthers inferior, with one lobe, thorny at the base.

Species.

420. EUPHRA'SIA OFFICINA'LIS . . . V.S. 1.
Common Eye-bright.

SP. CH. Leaves ovate, streaked and sharply toothed. *Woodville*, 220. *With.* 532. *E. B.* 1416. *Robson*, 85. *Abbot*, 448.

Dry pastures. July, September. Common. A.

OBS.

It was formerly in repute as a remedy for impaired vision; indeed, the character of Euphrasia was not unknown to Milton:—

———“then purged with euphrasy and rue,
The visual nerve, for he had much to see.”

421. EUPHRA'SIA ODONTI'TES . . . V.S. 2.
Red Eye-bright. Corn Eye-bright.

SP. CH. Leaves strap-shaped, all serrated. *With.* 533. *Abbot*, 449. *Robson*, 86. *Syn. Bartsia Odontites.* *E. B.* 1415.

Pastures and cornfields. August. Common. A.

Genus 4.

PEDICULA'RIS. Lousewort.

NAT. ORD. Personatæ.

GEN. CH. Calyx 5-cleft; capsules with 2 cells, pointed, slanting; seeds few, angular, pointed.

Species:

422. PEDICULA'RIS PALUS'TRIS . . . V. S. 1.
Marsh Lousewort.

SP. CH. Stem branched; calyx crested with callous dots; lip of the blossom slanting. *With.* 537.
E. B. 399. *Abbot*, 453. *Robson*, 87.

Marshes, moist meadows. July. Not common. P.

OBS.

This is an unwelcome guest in meadows, being very disagreeable to cattle. Withering.

423. PEDICULA'RIS SYLVAT'ICA . . . V. S. 2.
Common Lousewort.

SP. CH. Stem branched; calyx oblong, angular, smooth; lip of the blossom heart-shaped. *With.* 538. *E. B.* 400. *Abbot*, 464. *Robson*, 87.

Wet pastures, and heaths. May. Common. A.

OBS.

The palustris I have found in several places in this neighbourhood, but it is not so common as the

last species. It is said that if the healthiest flock of sheep be fed with the P. sylvatica, they become scabby and scurfy in a short time; the wool will grow loose, and they will be overrun with vermin; how necessary, then it is for the farmer, to eradicate so injurious a plant.

Genus 5.

MELAMPY'RUM. Cow-wheat.

NAT. ORD. Personatæ.

GEN. CH. Calyx 4-cleft; upper lip of the corol compressed, edges bent back; capsule 2 cells, compressed, slanting, opening on one side; seeds solitary, or two, bulging.

Species.

424. MELAMPY'RUM PRATEN'SE . . . V. S. 1.
Common Yellow Cow-wheat.

SP. CH. Flowers lateral, pointing one way; leaves in distant pairs; blossom closed. *With.* 535.
E. B. 113. *Park.* 1326. 1. *Abbot,* 451. *Rob-*
son, 86.

Woods. July. Rare. A.

Woods about Studley. Spermal Park.

Genus 6.

LATHRÆ'A. Toothwort.

NAT. ORD. Personatæ.

GEN. CH. Cup with 4 segments; a depressed gland at the base of the seam of the germ; capsule with 1 cell.

Species.

425. LATHRÆA SQUAMA'RIA 1.
Great Toothwort.

SP. CH. Stem very simple; blossoms hanging down; lower lips cloven into three. *Abbot*, 453. *With.* 537. *E. B.* 50. *Robson*, 85. *Park*. 1363. 4.

In shady places. Very rare. April. P.

In a thicket and dingle, by Hord's Park, Shropshire. *Hall*.

OBS.

Grows only in shady places which the sun's rays can scarcely penetrate, it being almost destitute of leaves, and such plants alone can live without the solar light. Linn. Withering.

Genus 7.

SCROPHULA'RIA. Figwort.

NAT. ORD. Personatæ.

GEN. CH. Cup 5-cleft; corol 5-cleft, ventricose or bellying, reversed; capsule with 2 cells opening at the top.

Species.

426. SCROPHULA'RIA NODO'SA V. S. 1.
Knobby-rooted Figwort.

SP. CH. Leaves heart-shaped, acute, serrated; stem with pointed angles; three fibres or nerves at the base of each leaf. *With.* 543. *Abbot*, 461. *E. B.* 1544. *Robson*, 87.

Woods and moist hedges. July. Common. P.

OBS.

This plant is hardly known in modern practice; but the rank smell and bitter taste of the leaves seem to indicate some active properties. Swine infected with the scab, have been cured by being washed with a decoction of the leaves. Withering. Med. and Phys. Journal, vol. 18. p. 171.

427. SCROPHULA'RIA AQUAT'ICA . . . V. S. 2.
Water Figwort. Water Betony.

SP. CH. Leaves heart-shaped, scalloped, blunt, on leaf-stalks, decurrent or running down the stem; corners of the stem edged with a membrane; bunches terminating. *With.* 544. *Abbot*, 462. *E. B.* 854. *Robson*, 87.

Watery ditches. Banks of rivers. Common. July.
P.

OBS.

It is reported that wonderful cures have been performed by the use of this plant, in the form of poultice, in scrophulous and even in cancerous cases. I cannot speak from experience.

Genus 8.

DIGITA'LIS. Fox-glove.

NAT. ORD. Solanaceæ.

GEN. CH. Calyx 5-cleft; corol bell-shaped, 5-cleft, ventricose; capsule ovate, with 2 cells.

Species.

428. DIGITA'LIS PURPU'REA V. S. 1.
Common Fox-glove.

SP. CH. Leaves of the calyx ovate, pointed; blossoms blunt, upper lip entire. *Woodville*, 24.
With. 545. *Abbot*, 463. *E. B.* 1297. *Robson*, 88.

Hedge-banks, road sides. July. Not common. B.
Alcester Heath. Sambourne.

Var. Flore albo. Near Bromsgrove, Worcestershire.

OBS.

This is one of the most active and is become the most useful medicine we have; but it requires great caution and considerable medical skill in the management of it.

Genus 9.

LIMOSEL'LA. Mudwort.

NAT. ORD. Preciæ.

GEN. CH. Calyx 5-cleft, corol 5-cleft, equal; stamens approaching in pairs; capsule 1 cell, 2 valves, many seeds.

Species.

429. LIMOSEL'LA AQUAT'ICA V. S. 1.

Plantain Mudwort or Mudweed.

SP. CH. Leaves spear-shaped. *With.* 547. *Abbot*, 464. *E. B.* 357. *Robson*, 71.

Muddy and gravelly places, and where water has stood during the winter. July. Rare. A.

In ditches and roads about Badsey. *Rufford*.

Genus 10.

OROBAN'CHE. Broom-rape.

NAT. ORD. Personatæ.

GEN. CH. Calyx 2-cleft, corol gaping; capsule with 1 cell, 2 valves, many seeds; a gland under the base of the germen or seed-bud.

Species.

430. OROBAN'CHE MA'JOR V. S. 1.

Common Broom-rape.

SP. CH. Stem undivided, downy; stamens the length of the corol or just emerging. *With.* 547. *Abbot*, 465. *E. B.* 421. *Robson*, 84. *Syn. Rapum Genistæ*. *Park.* 229. 1. A good figure.

Pastures and dry grounds, woods. June. Very rare. P.

OBS.

This parasitical plant was brought to me by my late much esteemed friend, Miss Arabella Rawlins,

of Pophills; it must be a rare plant, as I have never met with it but in one place amongst some gorse, by the side of the road from Pophills, leading to Mr. Gould's of Dunnington. It is generally found growing on the roots of the *Diadelphia* Class, as *Spartium Scoparium*, *Genista tinctoria*, &c. &c. The stem and flowers sometimes with a purplish tinge, but generally the whole plant is of a brown rust colour, and in full bloom has the appearance of a withered plant. This and the *Ophrys Nidus avis*, *Lathræa Squamaria*, with a few others, are closely connected in habit, for they may all be taken for dead plants, by an inattentive observer.

CLASS XV.

TETRADYNAMIA. Four Powers.

OBS.

This term signifies the power or superiority of four. This Class is truly natural, and has been considered as such by all Systematists; it is the *cruciformes* of Tournefort, and the *siliculosæ*, and *siliquosæ* of Ray. The essential character of the several genera, depends commonly on the situation of the nectariferous glandule.

CL. CH. Six stamens in the flower, four long and two short; capsule either a pouch or a pod.

ORDER I.

SILICULOSA. Seed-vessel, a Pouch.

Genus 1.

THLAS'PI. Shepherd's Purse.

NAT. ORD. Siliquosæ.

GEN. CH. Pouch nicked, inversely heart-shaped, with many seeds; valves boat-shaped, keeled and bordered.

Species.

431. THLAS'PI BURSA PASTO'RIS . . . V. S. 1.
Common Shepherd's Purse.

SP. CH. Pouches compressed, triangularly inversely heart-shaped, smooth, without a border; root-leaves wing-cleft. *With.* 560. *Abbot*, 467. *E. B.* 1485. *Robson*, 122.

Road sides, gardens, walls. April. Common. A.

432. THLAS'PI CAMPES'TRE . . . V. S. 2.
Common Pennycress. Bastard Cress, &c.

SP. CH. Pouches roundish; leaves arrow-shaped, toothed, hoary. *With.* 557. *E. B.* 1385. *Robson*, 122. *Park.* 836. 2.

Cornfields. July. Common. B.

433. THLAS'PI ARVEN'SE . . . V. S. 3.
Corn Pennycress. Treacle-mustard.

SP. CH. Pouches round and flat; leaves oblong, toothed, smooth. *With.* 557. *E. B.* 1659.

Robson, 122. *Park.* 836. 1.

Cornfields. July. Rare. A.

Alne Hills. Salford.

OBS.

There is much resemblance between this and the last species, but the wide border to the T. arvensis which almost meets at the top, and the largeness of the pouch will readily distinguish them. "The seeds of this plant have the acrimony of mustard; and the whole has something of a garlick flavour. When it is eaten by cows it imparts a disagreeable taste to the milk. Cows, goats, and swine eat it; horses and sheep refuse it." Withering. Med. and Phys. Journal, vol. 18. p. 174. "The T. Bursa pastoris is insipid to the taste; but it is recommended by many writers in hæmorrhages of all kinds, both as an internal or external application, either in man or beast." Lightfoot. Med. and Phys. Journal, vol. 18. p. 174.

Genus 2.

COCHLEA'RIA. Scurvy Grass.

NAT. ORD. Siliquosæ.

GEN. CH. Pouch emarginate or notched, turgid, rough; valves hunched, blunt.

Species.

434. COCHLEA'RIA ARMORA'CIA . . . V.S. 1.
Horse-radish.

SP. CH. Root-leaves spear-shaped, scalloped; stem-leaves cut. *Woodville*, 150. *With.* 563. *E. B.* 2323. *Robson*, 121.

Sides of ditches, banks of rivers. May. Rare. P.
On the River Arrow near Oversley Bridge.

OBS.

The root of this plant, which has long been received into the Materia Medica, is also well known at our tables; it is the only part that is employed, and it affords one of the most acrid substances of this Order, (siliquosa,) and therefore proves a powerful stimulant, whether externally or internally employed. An infusion of it in cold milk, makes one of the safest and best cosmetics. See Woodville. Withering. Med. and Phys. Journal. vol. 18. p. 272.

435. COCHLEA'RIA CORO'NOPUS . . . V.S. 2.
Swine's Cress. Buckshorn Scurvy-grass.

SP. CH. Leaves wing-cleft; stem depressed; root-leaves prostrate; leaflets cut along the fore-edge, entire on the back edge. *With.* 563. *Abbot*, 468. *Robson*, 121. *Syn. Coronopus Ruellii.* *E. B.* 1660.

Road sides, rubbish. June. Common. A.

OBS.

The whole plant is prostrate. Capsules rough or hedge-hogged. "This plant was rendered famous some years ago, by its ashes being an ingredient in Mrs Johanna Stephen's celebrated medicine for the stone and gravel; but unfortunately it has not supported its credit." Lightfoot. See Med. and Phys. Journal, vol 18. p. 271.

Genus 3.

DRA'BA. Whitlow-grass.

NAT. ORD. Siliquosæ.

GEN. CH. Pouch entire, oval-oblong, rather flatish; valves parallel to the partition; style or pointal none.

Species.

436. DRA'BA VER'NA V. S. 1.

Common Whitlow-grass. Vernal Nailwort.

SP. CH. Stalks naked; leaves somewhat serrated.

With. 554. *Abbot*, 466. *E. B.* 586. *Robson*, 120. *Park.* 556. 3.

Walls and fields. March. Common. A.

OBS.

One of our earliest flowering plants. It is good as a salad.

Genus 4.

I'BERIS. Candy Tuft.

NAT. ORD. Siliquosæ.

GEN. CH. Corol unequal, the two outer petals larger; pouch roundish, compressed; partition placed crosswise; 1 seed in each cell.

Species.

437. I'BERIS NUDICAU'LIS 1.
Rock Cress. Naked Iberis or Candy Tuft.

SP. CH. Herbaceous; leaves wing-cleft; stem naked, undivided. *With.* 564. *E. B.* 327. *Abbot*, 469. *Robson*, 123. *Park.* 828. 7.

Sandy banks and barren heaths. May, July.
Rare. A.

Coleshill Heath. *Bree.*

ORDER II.

SILIKUOSA. Seed-vessel a Pod.

Genus 1.

CARDAM'INE. Cardamine. Cuckow-flower.

NAT. ORD. Siliquosæ.

GEN. CH. Pod opening with elasticity, valves rolling back; stigma entire; calyx rather open.
Woodville.

Species.

438. CARDAM'INE PRATEN'SIS V. S. 1.
Common Cuckow-flower. Meadow Cardamine.

SP. CH. Leaves winged; root-leaflets nearly round; stem-leaflets spear-shaped. *Woodville*, 30. *With.* 588. *E. B.* 776. *Abbot*, 470. *Robson*, 127. Wet meadows and marshes. April. Common. P.

OBS.

This plant has the same sensible qualities as water-cress, though in an inferior degree to it. The flowers have a place in the Materia Medica of the British Pharmacopœas, upon the authority of Sir George Baker, who recommends them as an antispasmodic remedy. In epilepsy, however, this remedy has been generally found unsuccessful. The dose of the powdered flowers is from half a dram to two drams. Woodville. See Withering. Med. and Phys. Journal, vol. 18. p. 273.

439. CARDAM'INE FLEXUO'SA V. S. 2.
Zigzag Cardamine.

SP. CH. Stem zigzag; leaves winged, without leaf-scales; leaflets egg-spear-shaped, irregularly toothed, mostly alternate, unequal at the base. *With.* 567. *Syn. C. parviflora.* *Robson*, 127.

Ditches, woods, shady and boggy places. May, July. Rare. A.

The Rough at Alcester Mill.

440. CARDAM'INE HIRSU'TA V. S. 3.
Hairy Cardamine.

SP. CH. Leaves winged; leaflets opposite; stamens

4. *With.* 566. *Abbot*, 471. *E. B.* 492. *Robson*, 127

Wet places and on the driest banks. April. Not rare. A.

Coughton Lane. Sambourne, &c.

OBS.

The root leaves form a circle upon the ground. The young leaves are a good salad. It is pretty warm in the mouth, much resembling water cress in taste. Stokes. Withering.

441. CARDAM'INE AMA'RA V. S. 4.

Bitter Cresses or Cardamine.

SP. CH. Leaves winged; suckers from the bosom of the leaves. Leaflets of the stem-leaves angular, sitting. *With.* 568. *E. B.* 1000. *Robson*, 128.

Near purls of water, rivulets, boggy places, on the banks of rivers. May. Not very rare. P.

River Alne near Hoo-mill. The Arrow at Oversley, &c.

OBS.

The young leaves are palatable in salads; they are pungent, bitter, and aromatic, in such a degree as to promise very considerable medical uses. The anthers are purple not yellow as in C. pratensis; but the presence of the suckers is a sufficient distinction.

442. CARDAM'INE IMPA'TIENS . . . V. S. 5.
Impatient Cardamine.

SP. CH. Leaves winged; leaflets spear-shaped, tooth-
ed or cut, stipulæ fringed. *With.* 566. *Robson*,
127. *E. B.* 80. *Park.* 1241. 4.

Mountainous meadows, on the sides of rivulets, on
rocks and moist stony places. May, June. Rare.
A.

Side of Malvern Hill. Hanley Common. Worces-
tershire?

Genus 2.

ERY'S'IMUM. Hedge Mustard.

NAT. ORD. Siliquosæ.

GEN. CH. Pod like a pillar, exactly 4-sided; cup
closed.

Species.

443. ERY'S'IMUM OFFICINA'LE . . . V. S. 1.
Hedge Mustard, or Wormseed.

SP. CH. Pods pressed to the spike-stalk; leaves
notched. *Woodville*, 244. *With.* 573. *E. B.*
735. *Abbot*, 477. *Robson*, 126.

Road sides, amongst rubbish. Common. July. A.

OSS.

*When cultivated it is used as a spring pot-herb.
The juice mixed with honey is highly recommended
in ulcerations of the mouth and throat, and particu-
larly for hoarseness. In most cases of disease,*

perhaps the seeds of the Erysimum, as more pungent, should be preferred to its leaves. Woodville. Withering. Med. and Phys. Journal, vol. 18. p. 364.

444. ERYSIMUM ALLIARIA V.S. 2.

Garlick Hedge Mustard. Sauce alone, &c.

SP. CH. Leaves heart-shaped. *Woodville, 245. With. 574. E. B. 796. Abbot, 478. Robson, 126.*

Hedges, ditch banks. Common. May. B.

OBS.

The leaves of this plant have a moderate acrimony and a strong flavour, resembling that of garlick or onions; and have been used for the same culinary purposes; hence the name Alliaria. Its medicinal character is that of a powerful diaphoretic, diuretic and antiscorbutic; it has been deemed useful as an expectorant and deobstruent, in humoral asthmas, and other cases of dyspnœa. When it grows in poultry yards, the fowls eat it; and it gives an intolerable rank taste to their flesh. Cows and goats eat it; horses, sheep and swine refuse it. Med. and Phys. Journal, vol. 18. p. 365.

445. ERYSIMUM BARBAREA V.S. 3.

Winter Cresses. Land Cress.

SP. CH. Leaves lyre-shaped, the terminating segment roundish. *With. 573. Abbot, 479. E. B. 443. Robson, 126.*

On ditch banks, by the sides of running streams.
May. Common. P.

OBS.

I have introduced this plant into my garden; the young leaves early in the spring and even during the winter months, with the addition of corn salad (Valeriana Locusta) and the common celery make an excellent salad.

Genus 3.

SISYM'BRIUM. Water Cress.

NAT. ORD. Siliquosæ.

GEN. CH. Pod opening; valves almost straight; cup open; corol expanding.

Species.

446. SISYM'BRIUM NASTUR'TIUM. . . V. S. 1.
Common Water Cress.

SP. CH. Pods declining; leaves winged; leaflets nearly heart-shaped. *Woodville*, 48. *With.* 569.
E. B. 855. *Abbot*, 472. *Robson*, 128.

Springs and watery places. Common. June. P.

OBS.

This plant is an excellent antiscorbutic; and as a salad it is very universally used in the spring.
“In the pharmacopœias the juice of this plant is directed with that of scurvy-grass and Seville

oranges; and Dr. Cullen has remarked, that the addition of acids renders the juices of the plantæ siliquosæ more certainly effectual, by determining them more powerfully to an acescent fermentation." Woodville.

447. SISYM'BRIUM AMPHIB'IUM . . . V. S. 2.

Jagged leaved Water Cress.

SP. CH. Pods declining, oblong-egg-shaped; leaves winged, serrated. *With.* 570. *E. B.* 1840. *Abbot*, 474. *Robson*, 128. *Park.* 1229. 2.

Watery places, banks of rivers. Common. July. P.

448. SISYM'BRIUM TERRES'TRE . . . V. S. 3.

Annual Water Cress.

SP. CH. Leaves winged; pods full of seeds; petals shorter than the cup. *With.* 571. *E. B.* 1747. *Abbot*, 475. *Park.* 1228. 2.

Wet places, edges of ditches. July. Rare. A.

In the ditches on this side of Oversley Mill.

OBS.

The most distinguishing marks of this plant are, that the leaflets run in, or are confluent with the mid-rib of each leaf; and that the petals are shorter than the cup.

449. SISYM'BRIUM SO'PHIA . . . V. S. 4.

Flixweed.

SP. CH. Petals smaller than the cup, leaves winged.

and doubly compound. *With.* 572. *E. B.* 963.
Abbot, 476. *Robson*, 129. *Park.* 830. 3.

On rubbish, walls, court yards. June. Not com-
 mon. A.

Studley Castle, and at Dunnington in Mr. Gould's
 fold yard,

OBS.

*The seeds are given as a vermifuge. The an-
 cients held it in very high repute. It is said that if
 gun powder be mixed with one tenth part of these
 seeds the force will be augmented.*

450. SISYM'BRIUM TENUIFO'LIUM 5.

Wall Rocket.

SP. CH. Leaves smooth, nearly entire, the lower-
 most, once or twice pinnatifid or wing-cleft, the
 uppermost undivided. *With.* 571. *E. B.* 525.

Old walls and rubbish. June. Rare.

Ludlow Castle. *Rev. Francis Rufford*, Kinwarton.

451. SISYM'BRIUM SYLVES'TRE 6.

Creeping Water Cress.

SP. CH. Pods declining, oblong-egg-shaped; leaflets
 spear-shaped, serrated. *With.* 569. *Abbot*, 473.
E. B. 2324.

Marshy meadows and watery places. Rare. Ju-
 ly. P.

Badsey. *Rufford*.

Genus 4.

SINA'PIS. Mustard.

NAT. ORD. Siliquosæ.

GEN. CH. Cup expanding; claws of the blossom upright; a gland between the shorter filaments and the pointal, and between the longer and the cup.

Species.

452. SINA'PIS ARVEN'SIS V. S. 1.
Wild Mustard. Charlock.

SP. CH. Pods with many angles; torose or knobby from the bulging out of the seeds, smooth, longer than the 2-edged beak. *With.* 582. *E. B.* 1748. *Abbot*, 484. *Robson*, 126. *Park.* 862. 3.

Cornfields. June. Common. A.

OBS.

The name of Charlock, or as it is more commonly pronounced in the midland counties, Kedlock, is not confined to one plant only, but is indiscriminately applied to Sinapis nigra, Brassica Napus, Sinapis arvensis, and Raphanus Raphanistrum, as one or other of these abound more or less in different places. Mr. Pitt. Withering.

453. SINA'PIS AL'BA 2.
White Mustard.

SP. CH. Pods rough with bristles, beak sword-

shaped, oblique, very long. *With.* 583. *E. B.* 1677. *Abbot*, 485. *Robson*, 127.

Cornfields, and road sides. August. Rare. A. Grafton.

454. SINA'PIS NI'GRA 3.
Black Mustard.

SP. CH. Pods smooth, pressed close to the spike-stalk. *Woodville*, 151. *Abbot*, 486. *With.* 583. *E. B.* 969. *Robson*, 127.

Cornfields. July. Rare. A.

In a field at Exhall near to Rosall.

OBS.

The S. alba is sown early in the spring to supply our tables with salading. The seeds of the nigra reduced to powder, make the common mustard so much in request at our tables. It is also made use of medicinally, in various ways.

Genus 5.

AR'ABIS. Turkey-pod.

NAT. ORD. Siliquosæ.

GEN. CH. Honey-cup glands 4, one within each leaf of the cup, like a reflected scale; pod long, compressed, strap-shaped, entire, and knobbed at the end.

Species.

455. AR'ABIS THALIA'NA V. S. 1.

Mouse-ear Arabis or Turkey-pod.

SP. CH. Root-leaves spear-shaped, almost entire; leaves of the stem, toothed, sitting. *With.* 576.

E. B. 901. *Abbot*, 481. *Robson*, 124.

Walls and fields, dry banks. Not very common. April. A.

Coughton. Sambourne. Oversley.

OBS.

The root-leaves are disposed in a circle on the ground, the hairs at the base of the leaves simple, those on the edges and surface dividing into two or three forks.

Genus 6.

CHEIRAN'THUS. Wall-flower.

NAT. ORD. Siliquosæ.

GEN. CH. Germ with a glandular tooth on each side, cup closed, two of the leaves hunched at the base; seeds flat.

Species.

456. CHEIRAN'THUS CHEI'RI V. S. 1.

Common Wall-flower. Wild Gilliflower.

SP. CH. Leaves spear-shaped, pointed, smooth, very entire; branches angular; stem shrubby. *With.*

575. *E. B.* 1934. *Abbot*, 480. *Robson*, 123.

Park. 625. 1.

Old walls and roofs. May, June. Rare. P.

The ruins of the Old Church and Abbey Walls of Evesham.

OBS.

It has found a place in our gardens, where it has produced a considerable number of varieties, but none which have a more delightful scent than the wild one. Linn. Withering.

Genus 7.

RAPH'ANUS. Radish.

NAT. ORD. Siliquosæ.

GEN. CH. Calyx closed; pod protuberant, mostly jointed, cylindrical; honey-cup glands 2, between the shorter stamens and the pointal; and as many between the longer stamens and the calyx.

Species.

457. RAPH'ANUS RAPHANIS'TRUM . . . V. S. 1.
Wild Radish.

SP. CH. Pods round, jointed, smooth, with one cell.
With. 584. *E. B.* 856. *Abbot*, 487. *Robson*,
124. *Park.* 863. 4.

Among corn. July. Common. A.

OBS.

It grows in greater abundance among barley, than among any other grain. "In wet seasons it

grows in great quantity amongst the barley in Sweden, and it deserves to be remarked, that in those provinces, and in those seasons wherein this plant abounds, the common people, who eat barley bread, are afflicted with very violent convulsive complaints. Horses eat it; cows refuse it. See Med. and Phys. Journal, vol. 18. p. 369.

Genus 8.

TURRI'TIS. Tower Mustard.

NAT. ORD. Siliquosæ.

GEN. CH. Pod very long, angular, stiff and straight; calyx close, upright; blossom upright.

Species.

458. TURRI'TIS GLA'BRA V. S. 1.
Smooth Tower Mustard.

SP. CH. Root-leaves toothed, rough with hair; stem-leaves very entire, embracing the stem, smooth.
With. 578. E. B. 777. Robson, 126. Park. 852. 1.

Hedge-banks, pits and waste places, in a sandy and gravelly soil. May, June. Rare. A.

Obs.

Sides of hedges, upon hedge-banks in the lanes about Kidderminster and Stourbridge. Stem 2 or 3 feet high, simple cylindrical, slightly scored,

smooth; pods smooth, very numerous, lying to the stem and tiled.

Genus 9.

BRAS'SICA. Cabbage.

NAT. ORD. Siliquosæ.

GEN. CH. Calyx erect, close; glands, 1 between each shorter stamen and the pointal, and 1 between each pair of longer stamens and the calyx; seeds globular.

Species.

459. BRAS'SICA NA'PUS V. S. 1.
Rape. Wild Navew. Nape.

SP. CH. The root a regular continuation of the stem; spindle-shaped. *With.* 580. *E. B.* 2146. *Abbot*, 483. *Robson*, 125.

Ditch-banks, cornfields. May. Rare. B.

Arrow, on a hedge-bank bordering a cornfield in the road leading to Cookhill.

OBS.

“The seeds of the cultivated variety are called *coleseed*, afford a large quantity of expressed oil, called *rape oil*. What remains after the expressing of the oil is called *oil-cake*. It is used for fattening oxen; and is sold from 4 to 6,” and even 12[£] per ton. *Withering*.*

* QUERY.—Is it not the linseed cake which brings this great price?

460. BRAS'SICA RAPA 2.

Wild Turnip. Knolles.

SP. CH. The root a regular continuation of the stem, round, flatted, fleshy. *With.* 580. *E. B.* 2176. *Abbot*, 482. *Robson*, 125.

Cornfields, borders of cornfields. April. Not rare.
B.

OBS.

The roots are either eaten raw, boiled, or roasted. They relax the bowels; and are supposed to sweeten the blood. The roots kept in sand or in a cellar during the winter, send out white shoots and yellow leaves, which being rather sweet and not unpleasant to the palate, are used as salad, when other esculent herbs are not to be had. But the greatest use of turnips is in feeding oxen and sheep in the winter. Med. and Phys. Journal, vol. 18, p. 366.

CLASS XVI.

MONADELPHIA. One set, or Brotherhood.

CL. CH. The filaments or threads are all united at the base into one set, but separate at the top.

ORDER I.

PENTANDRIA. Five stamens.

Genus 1.

ERO'DIUM. Stork's-bill.

NAT. ORD. Gruinales.

GEN. CH. Cup of 5 leaves; corol of 5 petals; necessary 5 scales, with alternate filaments and honey-cup glands, sitting on the base of the threads; fruit 5 seeds, each with a beak; beaks twisted like a corkscrew, bearded within. *Abbot*.

Species.

461. ERO'DIUM CICUTA'RIUM V. S. 1.
Hemlock-leaved Stork's-bill.

SP. CH. Fruit-stalks with many flowers; leaves winged; leaflets sitting, with many divisions. *E. B.* 1768. *Abbot*, 488. *Syn. Geranium cicutarium.* *With.* 596. *Robson*, 109.

Walls and sandy fields. May, July. Rare. A.
Hords Park, near Bridgnorth, Shropshire.

462. ERO'DIUM MOSCHA'TUM V. S. 2.
Burnet-leaved Stork's-bill. Musky Stork's-bill.

SP. CH. Flowers in umbels; leaves winged; leaflets mostly sitting or on very short leaf-stalks, egg-shaped, rather deeply serrated, the serratures unequal. *E. B.* 902. *Syn. Geranium moschatum.* *With.* 596. *Robson*, 109.

At Cookhill, on the Ridgeway.

OBS.

This plant bears so exactly the burnet leaf, that there can be no doubt of the propriety of the name. The whole plant is more hairy than the cicutarium, and the hairs terminate in pellucid globules; leaflets opposite and alternate, the terminating one 3-cleft; seed-coat with strong yellow hairs; blossom red or purple.

463. ERO'DIUM MARITIMUM V. S. 3.

Sea Stork's-bill.

SP. CH. Stem prostrate; leaves heart-egg-shaped, scolloped, cut, rough; fruit-stalks, 1 to 3 flowers.

E. B. 646. *Syn. Geranium maritimum.* With. 593. Robson, 109.

Sandy sea shores. June, September. Common. P.

About Stourbridge, Kinver and Bewdley.

OBS.

The three last described plants may appear to resemble each other, and they certainly do in part; but on comparing them together they will readily be distinguished. "Among the numberless instances of obvious providential design and contrivance, in the structure of the seeds and seed-vessels of plants, few are, perhaps, more remarkable, or more strikingly display themselves as the workmanship of an intelligent artificer, than that which we meet with in the seeds of the E. cicutarium and moschu-

tum." Dr. Arnold. See *Withering*, for a very lively description of this curious piece of natural mechanism. I have often observed a similar process in several of the species of *Geraniums*; but the *Erodium moschatum* and the *geranium pratense* from the largeness of their seed-vessels are the best plants for the purposes of examination.

ORDER II.

DECANDRIA. Ten stamens.

Genus 1.

GERA'NIUM. Crane's-bill.

NAT. ORD. Gruinales.

GEN. CH. Cup of 5 leaves; corol regular, of 5 petals; nectary 5 honey-bearing glands, growing to the base of the longer threads; fruit a seed of 5 berries, beaked; beaks simple, naked, neither twisted nor bearded. *Abbot*.

Species.

464. GERA'NIUM MOL'LE V. S. 1.
Dove's-foot Crane's-bill.

SP. CH. Fruit-stalks with 2 flowers; floral leaves alternate; petals cloven; calyx awnless; stem nearly upright. *With.* 592. *E. B.* 778. *Abbot*, 495. *Robson*, 110.

Dry banks, cornfields, meadows and pastures, in a sandy soil. Common. May, October. A.

465. GERA'NIUM ROBERTIA'NUM . . . V. S. 2.
Herb Robert. Stinking Crane's-bill.

SP. CH. Leaves in fives and threes, lobes wing-cleft;
calyx with 10 angles. *With.* 595. *E. B.* 1486.
Abbot, 493. *Robson*, 110.

Walls, hedges, on rubbish and stony places. Com-
mon. April, May. A.

466. GERA'NIUM DISSEC'TUM . . . V. S. 3.
Jagged-leaved Crane's-bill.

SP. CH. Fruit-stalks shorter than the leaves; leaves
5-lobed; lobes 3-cleft or many-cleft; petals notch-
ed; seed-coats with soft hairs. *With.* 590. *E. B.*
753. *Robson*, 110. *Abbot*, 497.

Hedge-banks, road sides. June. Common. A.

OBS.

*The petals purple and sometimes of a blood co-
lour, of the length of the calyx; the stigmas, points
of the calyx and leaf-scales, of a deep carmine.*

467. GERA'NIUM PRATEN'SE . . . V. S. 4.
Crowfoot-leaved Crane's-bill. Meadow Crane's-
bill.

SP. CH. Fruit-stalk with 2 flowers; leaves with
nearly central foot-stalks, in many divisions,
wrinkled; lobes with winged clefts, acute; petals
entire. *With.* 593. *E. B.* 404. *Abbot*, 490.
Robson, 110.

Moistish meadows and pastures. June. Common. P.

468. GERA'NIUM SYLVAT'ICUM 5.
Wood Crane's-bill.

SP. CH. Fruit-stalks with 2 flowers; leaves somewhat target-shaped, with 5 lobes; stem erect; petals entire or only slightly nicked. *With.* 589. *E. B.* 121. *Robson*, 109.

Mountainous thickets and sides of rivers, in rocky and shady places. June. Rare. P.

Oversley Wood, Warwickshire. Dudmaston Woods, Shropshire. *Hall*.

469. GERA'NIUM LU'CIDUM V. S. 6.
Shining Crane's-bill.

SP. CH. Fruit-stalks with 2 flowers; cups pyramidal, angular; angles raised and wrinkled; leaves roundish, 5-lobed. *With.* 594. *E. B.* 75. *Abbot*, 494. *Robson*, 110.

Walls, roofs, rocky places, dry banks and shady lanes, in a sandy soil. June. Rare. A.

Badger Dingle, near Bridgnorth, Shropshire. In the lanes about Wolverley, and on the rocks at Great Malvern, Worcestershire. At Warwick and Kenilworth, Warwickshire.

470. GERA'NIUM COLUMBI'NUM V. S. 7.
Long-stalked Crane's-bill.

SP. CH. Fruit-stalks longer than the leaves; leaves 5-lobed; lobes many cleft; calyx with 5 angles; coat of the seeds, smooth. *With.* 590. *E. B.* 259. *Abbot*, 496. *Robson*, 110.

Cornfields, pastures and hedges. July. Rare. A.
Wixford Lane.

471. GERA'NIUM ROTUNDIFO'LIUM 8.
Round-leaved Crane's-bill.

SP. CH. Petals entire, as long as the calyx; stem spreading; leaves kidney-shaped, cut; seed-coat, even, hairy; seeds reticulated. *With.* 594. *E. B.* 157. *Robson*, 111.

Walls, roofs, ditch-banks and sandy pastures. July.
Rare. A.

On a wall at Hartlebury, Worcestershire.

OBS.

Each of the seeds in this tribe of plants, is terminated by a tail, assisting to form the beak; and which, when the seed is ripe, becomes spiral, and thus detaches the seed from the receptacle.

ORDER III.

POLYANDRIA. Many stamens.

Genus 1.

ALTHÆ'A. Marsh Mallow.

NAT. ORD. Columniferæ.

GEN. CH. Calyx double, outer with 9 clefts; seed-coats numerous, 1 seed in each. *Woodville*.

Species.

472. ALTHÆ'A OFFICINA'LIS* 1.

Marsh Mallow.

SP. CH. Leaves undivided, angular, cottony. *With.*

598. *E. B.* 147. *Woodville*, 53.

Salt marshes and banks of rivers. August. P.

OBs.

It is a native of England and flowers in August; there are many very luxuriant plants in this town. "The whole plant, particularly the root, abounds with a mild mucilage. The dry roots, boiled in water, give out half their weight of a gummy matter, that is nearly allied to Gum arabic, tragacanth, starch, &c. &c. The root boiled is much used as an emollient cataplasm; and an infusion of it is very generally prescribed in all cases where mild mucilaginous substances are useful." See Med. and Phys. Journal, vol. 18. p. 458.

Genus 2.

MAL'VA. Mallow.

NAT. ORD. Columniferæ.

* See Note 5.

GEN. CH. Calyx double, outer with 3 clefts; seed-coats many, 1 seed in each. *Woodville.*

Species.

473. MAL'VA ROTUNDIFO'LIA . . . V. S. 1.
Dwarf Mallow.

SP. CH. Stem prostrate; leaves heart-shaped, circular, plaited, 5 or 7-lobed; fruit when in seed, hanging down. *With.* 599. *E. B.* 1092. *Abbot*, 500. *Robson*, 80.

Road sides, amongst rubbish. June. Common. P.

474. MAL'VA SYLVES'TRIS . . . V. S. 2.
Common Mallow.

SP. CH. Stem herbaceous, upright; leaves with 7 pointed lobes; fruit-stalks and leaf-stalks hairy. *Woodville*, 54. *With.* 600. *E. B.* 671. *Abbot*, 499. *Robson*, 80.

By hedges and in waste places. June. Common. P.

OBS.

This plant has a strong affinity to Althæa both in a botanical and medicinal respect; but the leaves and flowers only are directed for use; the leaves afford a similar glutinous juice, fitted to answer the same purposes; and are therefore principally used in fomentations, cataplasms, and emollient enemæ; but their internal use is superseded by the root of the Marsh Mallow. Formerly, in the in-

*fancy of gardening, when the choice of esculent plants was very limited, this was a common article of diet; and the Chinese still eat the leaves, either raw as salad, or boiled like spinage. Woodville. See Med. and Phys. Journal, vol. 18. p. 458. **

475. MAL'VA MOSCHA'TA V. S. 3.
Musk Mallow.

SP. CH. Stem erect; root-leaves kidney-shaped, jagged; stem-leaves with 5 divisions, segments between, winged and cloven, into many divisions; leaflets of the outer cup distinct. *With.* 600, *E. B.* 754. *Abbot*, 501. *Robson*, 81.

Meadows, pastures and road sides. July. Not rare. B.

King's Coughton. The fields on this side of Coughton Court, &c. &c.

OBS.

The whole of the mallow tribe is mucilaginous and emollient.

* This is also the plant that is more particularly recommended, as a substitute for hemp: there are many others described in this work, that may be converted to similar purposes; the Hemp Nettle (*Galeopsis*) the Genus *Stachys*, &c. &c. See, a Prospectus published; under the title of the "Oeconomic Institution, to promote the knowledge, collection, manufacture, and use of articles, the growth of this country; and other objects calculated to give employment to the poor."

Signed,

Bolt-court, Fleet-street, T. J. PETTIGREW,
Dec. 1, 1816. Honorary Secretary (pro tempore.)

CLASS XVII.

DIADELPHIA. Two Sets, or Brotherhoods.

OBS.

Except the class Triandria, none is of such importance, in furnishing food to man and animals as this: it includes the leguminous plants, and is distinguished at first sight, by its papilionaceous corols.

CL. CH. The filaments are united at the base into 2 sets, but separate at the top.

ORDER I.

HEXANDRIA. Six stamens.

Genus 1.

FUMA'RIA. Fumitory.

NAT. ORD. Lomentaceæ.

GEN. CH. Calyx with 2 leaves; corol gaping; filaments 2, membranaceous, each supporting 3 anthers; capsule 1 cell, with many seeds.

Species.

476. FUMA'RIA OFFICINA'LIS V. S. 1.
Common Fumitory.

SP. CH. Stem spreading; capsules in bunches, with one seed in each. *Woodville*, 88. *With.* 606.
E. B. 589. *Abbot*, 502. *Robson*, 93.

Cornfields, kitchen gardens. May. Very common. A.

OBS.

It is to be wished, that this little plant was more attended to as a medicine; it certainly is very efficacious in all cutaneous eruptions, in obstructions of the viscera, and diseases thence arising; but it is needless to enlarge upon its medicinal qualities; when we have such an excellent book to refer to as the Medical Botany, by Dr. Woodville. "The expressed juice, or a decoction of the leaves in water, inspissated to the consistence of extracts, are very bitter and considerably saline; on standing for some time they throw up copious saline efflorescences, in figure resembling the crystals of nitre, bitterish and slightly pungent to the taste." An infusion of the leaves is used as a cosmetic to remove freckles and clear the skin. Cows and sheep eat it; goats are not fond of it; horses and swine refuse it. See Woodville. Med. and Phys. Journal, vol. 19. p. 71.

477. FUMA'RIA CLAVICULA'TA . . . V. S. 2.
Climbing Fumitory.

SP. CH. Legumens or seed-vessels, strap-shaped; leaves with tendrils. *With.* 607. *E. B.* 103. *Park.* 288. 6. *Robson,* 93.

Woods and moist hedges, boggy and rocky places, in a sandy soil. June, September. Rare. A.

At Malvern, upon the rocks above the village.

478. FUMA'RIA LU'TEA V.S. 3.

Yellow Fumitory.

SP. CH. Legumens strap-shaped, with 4 sides; stems spreading, the angles acute. *With.* 606. *E. B.* 588.

Found by the *Rev. W. S. Rufford*, on Broadway Hills, Gloucestershire.

ORDER II.

OCTANDRIA. Eight stamens.

Genus 1.

POLYG'ALA. Milkwort.

NAT. ORD. Lomentaceæ.

GEN. CH. Cup of 5 leaves; leaflets wing-shaped, coloured; pod inversely-heart-shaped, with 2 cells. *Woodville.*

Species.

479. POLYG'ALA VULGA'RIS V.S. 1.

Common Milkwort.

SP. CH. Flowers awned, in bunches; stems herbaceous, simple, trailing; leaves strap-spear-shaped. *With.* 608. *E. B.* 76. *Abbt*, 503. *Robson*, 90. *Park.* 1332. 2.

Barren spots, pastures and heaths. June. Common. P.

OBS.

This plant may truly be named the English Rattle-snake, as it possesses the same properties as the Senega Rattle-snake (Polyg'ala Senega. Woodville, 93) but in a milder degree. It purges without danger, is emetic and diuretic, and sometimes acts in these three different ways together. An infusion of the herb, which is very bitter, taken in the morning fasting, about a quarter of a pint daily, promotes expectoration, and is good for a catarrhus cough. Dr. Smith reports that he tried it with success. See Med. and Phys. Journal, vol. 19. p. 70.

ORDER III.

DECANDRIA. Ten stamens.

Genus 1.

SPAR'TIUM. Broom.

NAT. ORD. Papilionaceæ.

GEN. CH. Stigma longitudinal, woolly above; filaments adhering to the base; cup lengthened downwards.

Species.

480. SPAR'TIUM SCOPA'RIUM V. S. 1.
Common Broom.

SP. CH. Leaves in threes and solitary; branches without prickles, angular. *Woodville, 89. With.*
609. *E. B. 1339. Abbot, 504. Robson, 130.*

Dry pastures and sandy fields. May. Common. S.

OBS.

It is not common in this part of Warwickshire, but very much so in Shropshire near to Bridgnorth. The tops and leaves have a nauseous bitter taste; they are commended for their purgative and diuretic qualities, and have therefore been successfully employed in hydropic cases, of which particular instances are related by Dr. Mead, and others; a patient by drinking half a pint of a decoction of the green tops, with a spoonful of whole mustard seed, every morning and evening, was cured, after being tapped three times, and having tried the usual remedies given in dropsies. Dr. Cullen orders half an ounce of fresh broom tops to be boiled in a pound of water till one half is consumed; of this decoction he gives two table-spoonfuls every hour till it operates by stool, or till the whole was taken. The tender branches are not inferior to oak bark for tanning; and they are sometimes mixed with hops for brewing. Cows, horses, and sheep refuse it. Woodville. Med. and Phys. Journal, vol. 19. p. 74.

Genus 2.

U'LEX. Furze. Gorze.

NAT. ORD. Papilionaceæ.

GEN. CH. Calyx of 2 leaves; legumen scarcely longer than the calyx.

Species.

481. U'LEX EUROPE'US 1.

Common Furze.

SP. CH. Calyx shorter than the corol, with 2 spear-shaped deciduous scales at the base; leaves woolly, pointed; thorns scattered. *With.* 612. *E. B.* 742. *Abbot*, 507. *Robson*, 131.

Heaths, road sides. April. Common. S.

OBS.

Cows, sheep, and horses, feed upon the tender tops. Team horses may be supported by this shrub, if it is cut young and bruised in a mill to break the thorns. Med. and Phys. Journal, vol. 19. p. 75.

Genus 3.

ONO'NIS. Rest-harrow.

NAT. ORD. Papilionaceæ.

GEN. CH. Calyx of 5 leaves, segments strap-shaped; standard scored; filaments united, without an opening; legumens swollen, sitting, simple, with 1 cell.

Species.

482. ONO'NIS ARVEN'SIS V. S. 1.

Field Rest-harrow.

SP. CH. Flowers in bunches, 2 together; leaves 3 together, the upper ones solitary; branches without thorns, somewhat woolly. *With.* 613. *E. B.* 682. *Abbot*, 508.

Road sides, cornfields. June. Common. P.

OBS.

Stem prostrate, whole plant clammy.

483. ONO'NIS SPINO'SA V. S. 2.

Thorny Rest-harrow.

SP. CH. Flowers in bunches, solitary; leaves in threes or single; branches thorny. *With.* 613.

Abbot, 509. *Robson*, 131. *Park.* 994. 1.

Barren pastures, holloways. July. Not common.
P.

OBS.

The stem in this species is always upright and not so clammy as the preceding one. The roots run under the ground, and are so strong that they jerk the harrows, hence the trivial name Rest-harrow.

Genus 4.

ANTHYL'LIS. Ladies' Finger.

NAT. ORD. Papilionaceæ.

GEN. CH. Calyx ventricose or bellying; legumen or shell, roundish, covered.

Species.

484. ANTHYL'LIS VULNERA'RIA V. S. 1.

Common Ladies' Finger.

SP. CH. Herbaceous; leaves winged, unequal; flowers in a double head. *With.* 614. *E. B.* 104. *Abbot*, 510. *Robson*, 130.

Meadows and pastures, in a chalky or calcareous soil. June. Not very common. P.

Kinwarton. Coughton Fields. Shottery. Cleve.

OBS.

The structure of the filaments is singular; towards the top they swell out like a hollow bladder, in shape of an inverted pyramid; and the anthers are fixed to the central part of the base of the pyramid. It is an excellent pasturage for sheep. The country people get a yellow dye from it. Withering.

Genus 5.

GENIS'TA. Greenwood.

NAT. ORD. Papilionaceæ.

GEN. CH. Calyx with 2 lips, the upper 2, the lower 3-toothed; standard oblong, bent downwards from the stamens and pointal; legumen regular-shaped.

Species.

485. GENIS'TA TINCTO'RIA V. S. 1.
Dyer's-weed. Yellow Greenwood or Greenweed.
Woodwick, &c.

SP. CH. Branches scored, cylindrical, erect; leaves spear-shaped, smooth; legumen cylindrical. *With.*

610. *E. B.* 44. *Abbot*, 505. *Robson*, 131. *Park*. 229. 7.

Pastures and borders of cornfields. June. Rare. S.
Coughton fields, near Beauchamps Court, &c.

OBS.

A yellow colour may be prepared from the flowers, and for wool that is to be dyed green, the dyers prefer it, to all others. Most animals eat it. Withering.

486. GENIS'TA ANG'LICA 2.
Needle Furze. Petty Whin.

SP. CH. Thorns simple and compound; flowering branches without prickles; leaves spear-shaped. *With.* 611. *E. B.* 132. *Abbot*, 506. *Robson*, 130. *Park*. 1004. 4.

Heaths and moist spongy ground. May. Very rare. S.

Coleshill Heath. *Bree*. In the neighbourhood of Stourbridge, Worcestershire; but nearly extinct since inclosures have been general. *Scott*.

Genus 6.

ER'VUM. Tare.

NAT. ORD. Papilionaceæ.

GEN. CH. Calyx with 5 divisions, as long as the corol,

Species.

487. ER'VUM HIRSU'TUM V. S. 1.

Rough Podded Tare. Wild Tine Tare.

SP. CH. Fruit-stalks with many flowers; seeds 2, globular. *With.* 626. *E. B.* 970. *Abbot*, 523. *Robson*, 134.

Sandy cornfields and meadows. June. Common. A.

OBS.

In wet seasons, whole fields of corn have been wholly destroyed by it; this remark is worthy the attention of the industrious farmer.

488. ER'VUM TETRASPER'MUM . . . V. S. 2.

Smooth Podded Tare. Strangle Tare.

SP. CH. Fruit-stalks with mostly 2 flowers; seeds 4, globular. *With.* 625. *E. B.* 1223. *Abbot*, 522. *Robson*, 134.

Cornfields, hedges, and borders of ploughed fields. June. Common. A.

OBS.

This appears to be, as mischievous a weed as the former.

Genus 7.

VI'CIA. Vetch.

NAT. ORD. Papilionaceæ.

GEN. CH. Stigma with a transverse beard on the lower side.

Species.

489. VI' CIA CRAC' CA V. S. 1.
Tufted Vetch.

SP. CH. Flowers tiled; leaflets spear-shaped, pubescent; stipulæ or leaf-scales entire. *With.* 621. *E. B.* 1168. *Abbot*, 517. *Robson*, 133.

Woods, hedges. June. Common. P.

OBS.

Dr. Plot, in his Natural History of Staffordshire, p. 204, says, that the V. Cracca, and sylvatica (which I have not yet found) advance starven or weak cattle above any thing yet known. Withering.

490. VI' CIA SATI' VA V. S. 2.
Common Vetch.

SP. CH. Legumes mostly in pairs, upright, sitting; leaves indented at the end; leaf-scales with a burnt spot underneath. *With.* 622. *E. B.* 334. *Abbot*, 518. *Robson*, 133.

Fields, pastures. June. Common. A.

OBS.

The farmers sow it as pasturage for horses, and eat it off early enough to allow of turnips being

sown the same year. The seeds are excellent food for pigeons.

491. VI'CIA SE'PIUM V.S. 3.
Bush Vetch.

SP. CH. Legumes on partial fruit-stalks, mostly in fours, upright; leaflets ovate, very entire, outer ones decreasing in size to the end. *With.* 623. *E. B.* 1515. *Abbot*, 520. *Robson*, 134.

Woods, hedges, pastures. June. Common. P.

OBS.

Shoots earlier in the spring than any other plant eaten by cattle; vegetates late in the autumn, and continues green all winter. A patch of them sown in drills in a garden was cut 5 times in the course of the second year, and produced at the rate of 24 tons per acre of green food, which when dry, would weigh near $4\frac{1}{2}$ tons. Bath, Soc. iii. Mr. Swayne observes, that though very palatable to all kinds of cattle, it is difficult to cultivate on a large scale, the seeds being generally devoured by the larvæ of some species of insect. See Withering.

492. VI'CIA LATHYROI'DES 4.
Strangle Vetch.

SP. CH. Legumes solitary, erect, smooth; leaflets about 6, the lower ones inversely heart-shaped; stipulæ or leaf-scales half arrow-shaped, very en-

tire; seeds cubic, warty. *With.* 623. *E. B.* 30. *Abbot*, 521.

Dry pastures, gravel pits and cornfields in sandy and chalky soils. May. Rare. A.

On the side of the bridle road from Spennall to Studley.

OBS.

The true leading characters of this species are, the blossom being scarcely longer than the calyx, the seeds cubic, and the tendril never branched. Withering.

493. VI' CIA ANGUSTIFO' LIA . . . V. S. 5.
Narrow leaved Vetch.

SP. CH. Pods or legumens nearly sitting, about 2 together, expanding; lower leaflets inversely heart-shaped, nicked and pointed, upper ones strap-shaped. *Abbot*, 519. *Syn. V. Sativa. Var.* 3. *With.* 622.

Woods, heaths, hedge-banks. June. Common. A.

OBS.

Its bright red purple blossoms, at some little distance, may be taken for the crimson grass vetch (Lathyrus Nissolia.)

Genus 8.

LATH'YRUS. Vetchling.

NAT. ORD. Papilionaceæ.

GEN. CH. Style flat, woolly above, broader upwards, two upper segments of the cup shortest.

Species.

494. LATH'YRUS PRATEN'SIS V. S. 1.
Common Yellow or Meadow Vetchling.

SP. CH. Fruit-stalks with many flowers; tendrils with 2 leaves undivided; leaflets spear-shaped.
With. 619. *E. B.* 670. *Abbot*, 515. *Robson*, 132. *Park.* 1061. 1.

Meadows, hedges. July. Common. P.

OBS.

L. pratensis has been recommended as a new plant for the experiments of the farmers, and premiums have been offered for its cultivation. But it does not seem to be a plant at all agreeable to cattle, as where they have a choice of food they seldom touch it. Besides, it produces very few seeds, and those are for the most part devoured by a species of insect. *Mr. Swayne.* See *Withering*.

495. LATH'YRUS LATIFO'LIUS 2.
Broad-leaved Vetchling or Pea everlasting.

SP. CH. Tendrils with 2 leaflets; leaflets spear-shaped; stem with membranaceous borders between the knots. *With.* 620. *E. B.* 1108. *Abbot*, 514. *Robson*, 133.



Woods. July. Rare. P.

Spennall Park.

OBS.

The beauty of its flowers has obtained it a place in our shrubberies and flower borders. Dr Stokes. Withering.

496. LATH'YRUS NISSO'LIA. . . . V. S. 3.

Crimson Grass Vetch.

SP. CH. Fruit-stalks with 1 flower; sometimes with 2; leaves simple; leaf-scales awl-shaped.

With. 618. *E. B.* 112. *Abbot*, 512. *Robson*, 132. *Park.* 1079. 4.

Borders of cornfields and pastures. June. Rare. A.

Coughton. Great Alne.

OBS.

The leaves resemble those of grass, so much so, that unless the plant be in flower it may readily be overlooked.

497. LATH'YRUS APH'ACA (*see fig. 3.*) V. S. 4.

Yellow Vetchling.

SP. CH. Flowers solitary; tendrils without leaves; leaf-scales arrow-heart-shaped. *With.* 617. *E. B.*

1167. *Robson*, 132. *Park.* 1067.

Sandy cornfields and meadows. June, September.

Rare. A.

Alne Hills. Cleve. Littleton.

OBS.

A very singular and beautiful plant, and also a very rare one. "Stems 4-cornered, trailing; stipulæ or leaf-pros, oval-spear-shaped; arrow-shaped at the base, in pairs, smooth, somewhat sea-green. The stipulæ supply the place of leaves, and as such they might be considered, but the real leaves are very minute, and only exist according to Mr. Curtis, for a short time after the sprouting of the seed." Withering.

Genus 9.

OR'OBUS. Peaseling.

NAT. ORD. Papilionaceæ.

GEN. CH. Calyx blunt at the base, upper segments deeper and shorter; style strap-shaped.

Species.

498. OR'OBUS TUBERO'SUS V. S. 1.
Tuberous Peaseling or Orobus.

SP. CH. Leaves winged, spear-shaped; leaf-scales half-arrow-shaped, very entire; stem simple.
With. 616. *E. B.* 1153. *Abbot*, 511. *Robson*, 132.

Woods. April. Common. P.

OBS.

Pods flat, black, pendent. The roots when boiled,

are savoury and nutritious; ground to powder, they may be made into bread. Horses, cows, goats, and sheep eat it. Withering.

Genus 10.

HEDYS'ARUM. Saintfoin.

NAT. ORD. Papilionaceæ.

GEN. CH. Keel of the blossom transversely blunt; legumen or pod jointed, with 1 seed in each joint.

Species.

499. HEDYS'ARUM ONO'B'RYCHIS . . V. S. 1.
Common Saintfoin.

SP. CH. Leaves winged; pods with 1 seed, prickly; wings of the corol as long as the calyx; stem lengthened out. *With.* 628. *E. B.* 96. *Abbot*, 526. *Robson*, 135. *Park.* 1082. 1.

Meadows and pastures in a calcareous soil. June.
Rare. P.

Grafton. Bilsley.

OBS.

This is cultivated like clover for feeding cattle, and is particularly advantageous in dry hilly situations, and chalky soils. Withering.

Genus 11.

LO'TUS. Claver.

NAT. ORD. Papilionaceæ.

GEN. CH. Calyx tubular; wings approaching upwards longitudinally; pod cylindrical, quite straight.

Species.

500. LO'TUS CORNICULA'TUS . . . V. S. 1.
Birdsfoot Claver.

SP. CH. Heads of the flowers flatted at the top; stem herbaceous, trailing; pods cylindrical, expanding.
With. 642. *E. B.* 2090. *Abbot*, 541. *Rob-*
son, 138.

Dry pastures, meadows, road sides. June. Com-
mon. P.

OBS.

This is an excellent food for sheep. The flowers become greenish when dried, in which respect they resemble the flowers of the plants which produce indigo. Med. and Phys. Journal, vol. 19. p. 163.

501. LO'TUS MA'JOR 2.
Greater Birdsfoot Claver.

SP. CH. Stem erect; leaves and the unexpanded heads, very woolly. (*E. B.* 2091. *L. cornicu-*
latus. *Var.* 2. *Linn.* *With.* *Var.*—*c.* *Rob-*
son, 138.)

Woods, moist hedges and meadows. June, Au-
gust. Common. P.

OBS.

“The common trailing sort, and the upright which grows in woods, ought, I think, to be specifically distinguished. The legumens of the former grow gradually larger, those of the latter more taper towards the end. Withering.

Genus 12.

TRIFO'LIUM. Trefoil.

NAT. ORD. Papilionaceæ.

GEN. CH. Flowers mostly capitate or forming a head; pod scarcely longer than the cup, not opening, but falling off entire.

Species.

502. TRIFO'LIUM PRATEN'SE V. S. 1.
Honey-suckle Trefoil. Red Clover.

SP. CH. Spikes nearly globular, somewhat woolly, surrounded by leaf-scales, which are opposite, with membranaceous borders; corol of 1 petal.
With. 637. *E. B.* 1770. *Abbot*, 531. *Robson*, 137.

Pastures and meadows. June. Common. P.

503. TRIFO'LIUM ME'DIUM V. S. 2.
Zigzag Trefoil.

SP. CH. Spikes loose; blossom nearly regular; stipulæ awl-shaped, converging; stems zigzag, branched. *With.* 636. *E. B.* 190. *Abbot*, 532.

Pastures, meadows, sides of hedges and woods.
July. Rare. P.

Oversley Hill. Bilsley Field.

OBS.

“Cattle are not fond of it till it is touched by the frost. This is not marle grass. The true marle grass of the shops is, the native T. pratense. A circumstance which particularly distinguishes the Trifolium medium, is its propagating itself by the root. Mr. Swayne. Withering.

504. TRIFO'LIUM RE'PENS V. S. 3.

White Meadow Trefoil. Dutch Clover.

SP. CH. Heads like umbels; pods with 4 seeds; stem creeping. *With.* 632. *E. B.* 1769. *Abbot,* 529. *Robson,* 136.

Meadows and pastures. May. Common. P.

OBS.

Horses, cows, and goats eat it. Sheep are not fond of it. Swine refuse it. Wherever this plant abounds spontaneously, it is always considered as an indication of the goodness of the soil; and this is well known to farmers. Withering.

505. TRIFO'LIUM PROCUM'BENS V. S. 4.

Procumbent Trefoil. Hop Trefoil.

SP. CH. Spikes somewhat ovate, tiled; standards

permanent, bowed down; stems spreading. *With.*
640. *E. B.* 945. *Abbot*, 538. *Robson*, 138.

Cornfields, meadows. June. Common. A.

506. TRIFO'LIUM FILIFOR'ME V. S. 5.
Small Trefoil.

SP. CH. Spikes somewhat tiled, oval, few-flowered;
stems trailing; cups on partial fruit-stalks. *With.*
640. *Abbot*, 540. *E. B.* 1257. *Robson*, 138.

Poor sandy heaths and pastures. May. Not very
rare. A.

Astwood Common, &c. Worcestershire.

OBS.

*Every flower stands on a distinct thread-shaped
fruit-stalk. Abbot.*

507. TRIFO'LIUM ARVEN'SE V. S. 6.
Hare's-foot Trefoil.

SP. CH. Spikes woolly, oval; teeth of the cup bris-
tle shaped, woolly, equal. *With.* 635. *E. B.*
944. *Abbot*, 534. *Robson*, 137. *Park.* 1107. 6.
Excellent.

Sandy pastures and cornfields. July. Not com-
mon. A.

In the neighbourhood of Worcester, common. Sal-
ford. Dunnington, Warwickshire.

508. TRIFO'LIUM FRAGIF'ERUM . . . V. S. 7.
Strawberry Trefoil.

SP. CH. Spikes nearly globular; cups inflated, with
2 teeth bent back; stems creeping. *With.* 639.
E. B. 1050. *Abbot*, 537. *Robson*, 138. *Park*.
1109. 5.

Wet pastures and moist meadows. August. Not
common. P.

Oversley. Kinwarton, Warwickshire. Cleve,
Worcestershire.

OBS.

*The trivial name is very applicable, as it has
very much the resemblance and air of a strawberry.*

509. TRIFO'LIUM MELILO'TUS OFFICINA'LIS V. S. 8.
Melilot. Melilot Trefoil.

SP. CH. Pods in bunches, naked, 2 seeds in each,
wrinkled, pointed; stem upright. *With.* 631.
E. B. 1340. *Abbot*, 528. *Robson*, 136. *Park*.
719. 1.

Cornfields, meadows, and ditch banks. June.
Not very common. A.

Spernall. Kinwarton. Grafton, Warwickshire.
Cleve, Worcestershire.

OBS

*This is a lofty plant, and is more fragrant when
dry, than when green. Horses are extremely fond*

of it. Cows, goats, sheep, and swine eat it. The flowers of all the species of *Trifolium*, dried and powdered, may be made into bread, which in times of scarcity, has preserved the inhabitants of Scotland from perishing. *Withering.*

Genus 13.

MEDICA'GO. Medick.

NAT. ORD. Papilionaceæ.

GEN. CH. Pointal bent, pressing down the keel and springing out of it with a jerk; seed vessel a legumen, flat, bent, or twisted spirally. *Withering.*

OBS.

The pod in some species, is rolled up spirally, like a snail-shell; in others it is bent like a bow, or a sickle.

Species.

510. MEDICA'GO SATI'VA V.S. 1.
Lucerne. Lucern Medick.

SP. CH. Flowers in bunches; pods narrow, regular, twisted; stem upright, smooth. *With.* 643.

E. B. 1749. *Abbot*, 542. *Robson*, 139.

Meadows, pastures, and ditch banks. July. Rare.
P.

Grafton, Warwickshire. Cleve, Worcestershire.

OBS.

“ All kinds of cattle are fond of it; it is extremely

productive, but should be given cautiously at first, as too great abundance will in some horses occasion the staggers. The cultivation of this plant is strongly recommended by modern writers on husbandry. Pigs devour it greedily, and cows fatten on it."
Withering.

511. MEDICA'GO LUPULI'NA . . . V. S. 2.

Black Medick. Hop Medick. Black Nonsuch.

SP. CH. Spikes oval, pods kidney-shaped, with 1 seed in each; stem trailing. *With.* 645. *E. B.*

971. *Abbot*, 543. *Robson*, 139.

Cornfields, dry pastures. June. Common. A.

USES.

Cows, horses, goats, and sheep eat it; but it is less grateful to them than the other species. Linn. It is cultivated in Norfolk under the name of Nonsuch, and is usually sown mixed with Rye-grass (Lolium perenne.) The crop is then called black and white Nonsuch. In the Isle of Wight it is sown along with clover and rye-grass. Withering.

Genus 14.

ASTRAG'ALUS. Cock's-head.

NAT. ORD. Papilionaceæ.

GEN. CH. Legume with 2 cells, gibbous or hunched.

Species.

512. ASTRAG'ALUS GLYCYPHYL'LOS . . V. S. 1.

Wild Liquorice. Liquorice Vetch.

SP. CH. Stems prostrate, leafy; pods nearly 3-square, bent like a bow; leaves longer than the fruit-stalks; leaflets oval. *With.* 629. *E. B.* 203. *Abbot*, 527. *Robson*, 135.

Hedges, meadows, and ditch banks. July. Rare. P.

Oversley. Grafton, Warwickshire. Cleve Hill, Worcestershire. Buck Orchard, Hords Park, Shropshire.

OBS.

Leaflets usually 5 pair, with an odd one, mostly opposite, smooth, and very entire. Horses, cows, and sheep eat it. Swine refuse it.

Genus 15.

ORNI'THOPUS. Bird's-foot.

NAT. ORD. Papilionaceæ.

GEN. CH. Capsule or seed-vessel jointed, round, arched.

Species.

513. ORNI'THOPUS PERPUSIL'LUS . . . V.S. 1.
Common Bird's foot.

SP. CH. Leaves winged; pods bowed inward, much larger than the winged flower-scale. *With.* 626. *E. B.* 369. *Abbot*, 524. *Robson*, 135. *Park.* 1092.

Sandy banks and heaths. June. Rare. A.

Kinver, Staffordshire. Coleshill Heath, Warwickshire. Malvern, Worcestershire. “Morf, near Bridgnorth, Shropshire.” *Hall.*

OBS.

A very tender, delicate and beautiful plant. Stems trailing, from 1, to 6 or 8 inches high; root spindle-shaped, lateral fibres knotty; leaflets, from 3 to 14 pair, with an odd one; the standard of the corol, reddish white, with red lines; wings white, with a reddish tinge; keel, a pale straw colour.

CLASS XVIII.

POLYADELPHIA. Many Sets or Brotherhoods.

CL. CH. The filaments in many sets; united at the base, separate at the top.

ORDER I.*

POLYANDRIA. Many stamens.

OBS.

There is no British Genus in either of the preceding† Orders;—and this is the only Genus belonging to the Class. It contains but a very few exotics, among which are oranges and Lemons.

* This would be Order XIV. according to the arrangement proposed at the beginning of this work.

† See Note 2.

Genus 1.

HYPE'RICUM. Saint John's-wort.

NAT. ORD. Ascyroideæ.

GEN. CH. Calyx of 5 segments; petals 5; threads many, united at the base into 5 sets. A capsule, with 3 or 5 cells, and many seeds. *Withering.*

Species.

514. HYPE'RICUM PERFORA'TUM. . . V. S. 1.
Common Saint John's-wort.

SP. CH. Pointals 3; stem 2-edged; leaves blunt, with transparent dots. *Woodville*, 10. *With.* 648. *E. B.* 295. *Abbot*, 544. *Robson*, 116.

Woods and hedges. July. Common. P.

OBS.

The anthers are yellow, and are marked with a small black gland, which will distinguish this species at once; the stigmas sometimes crimson. This plant has long held a place in the Materia Medica, but its use is very much undetermined. It was in great repute with the ancients, who prescribed it in hysteria, hypochondriasis, and mania; it is now however, rarely used, and has been omitted in the Edinburgh Mat. Med.; in that of the London Coll. the flowers only, are directed to be used, as containing the greatest proportion of the resinous oily matter in which the medical efficacy of the plant is supposed to reside; the dark puncta or dots

of the petals and capsules afford this essential oil, which is contained in minute vesicles, and gives a red colour to rectified spirit and to expressed oils; it gives a good dye to wool. See Woodville. Med. and Phys. Journal, vol. 19. p. 164.

515. HYPE'RICUM ANDROSÆ'MUM . . . V. S. 2.
Tutsan. Park-leaves.

SP. CH. Pointals 3; fruit a berry; stem shrubby, 2-edged. *With.* 647. *E. B.* 1225. *Robson*, 116. *Park.* 576. 1.

Woods and moist hedges. July. Rare. P.

Between Bridgnorth and Faintree, on the side of the turnpike-road, Shropshire.

OBS.

“This is a good vulnerary; the leaves readily healing any fresh wounds; and thence it has derived the name of Tutsan from the French Tout-sain, or All-heal.” Lightfoot. Med. and Phys. Journal, vol. 19. p. 165. The garden Tutsan (H. Ascyron) which goes very improperly under the name of the Bethlehem Star; the roots creep and it has 5 pointals; and the stem is square.

516. HYPE'RICUM HIRSU'TUM . . . V. S. 3.
Hairy Saint John's-wort.

SP. CH. Styles or pointals 3; stem cylindrical erect; leaves ovate, somewhat downy; cup notched, with

glandules. *With.* 651. *E. B.* 1156. *Abbot*, 548. *Robson*, 116.

Woods and hedges. July. Not rare. P.

OBS.

The leaves are broader and more hairy than those of the H. perforatum, and the stigmas are always crimson.

517. HYPE'RICUM QUADRAN'GULUM . . V. S. 4.
Saint Peter's-wort. Quadrangular Saint John's-wort.

SP. CH. Pointals 3; stem square, herbaceous; leaves oblong-ovate, with a few pelucid dots. *With.* 648. *E. B.* 370. *Abbot*, 545. *Robson*, 117.

Moist hedges, bogs and ditches. July. Common. P.

OBS.

Stem reddish, smooth, branched; styles yellow; stigmas purple.

518. HYPE'RICUM HUMIFU'SUM . . . V. S. 5.
Trailing Saint John's-wort.

SP. CH. Pointals 3; flowers solitary, from the bosom of the leaves; stems 2-edged, prostrate, thread-shaped; leaves smooth. *With.* 649. *E. B.* 1226. *Abbot*, 546. *Robson*, 116.

Hedge banks, pastures, heaths. July. Rare. P.
Kings Coughton. Alcester Heath, Warwickshire.
Astwood Common, Worcestershire.

OBS.

Stems numerous, branches often forked; leaves opposite, ovate, sitting, entire; red towards the root.

519. HYPE'RICUM PUL'CHRUM . . . V.S. 6.
Upright Saint John's-wort.

SP. CH. Pointals 3; calyx serrated, with glands; leaves heart-shaped, embracing the stem, smooth; stem round. *With.* 651. *E. B.* 1227. *Abbat.* 549. *Robson*, 116.

Woods, hedges, and heaths. July. Rare. P.
Oversley Wood. Ragley Woods, &c.

OBS.

This and the H. montanum which I have not met with, appear in many respects to correspond; they only vary in the leaves of the former being heart-shaped and the latter ovate or egg-shaped. The habitat of the former is generally in woods, which is also that of the latter. The stem of the H. pulchrum is erect, often red; leaves in distant pairs, green above, sea-green beneath; anthers scarlet.

520. HYPE'RICUM ELO'DES V. S. 7.
Marsh Saint John's-wort. Woolly Saint Peter's-
wort.

SP. CH. Pointals 3; stem cylindrical, creeping,
woolly; leaves woolly, roundish. *With.* 650.
E. B. 109. *Abbot*, 547. *Robson*, 116.

Marshy places, bogs. July, August. Rare. P.
Coleshill Bog and Pool.

OBS.

*Blossom, reddish yellow, usually closed, twisted
spirally; sometimes merely folded up. Withering.*

NOTES EXPLANATORY.

NOTE I.

Nearly the whole of the English Fungi, and also the cryptogamiæ of the English Botany, are in my possession. I regret exceedingly, that the greater part of this work was written, before a General Index to the E. Botany was published: if I had seen it sooner, most of the plants should have had a place, agreeably to the order and arrangement laid down in that work; which may very justly be termed, the Key-stone of British Botany.

NOTE II.

As the Orders of the first thirteen Classes take their denominations from the number of pointals or stigmas; I have hitherto, followed that plan strictly; and consequently have placed *Butomus* in the sixth Order, agreeably to that arrangement.* It

* OBS.—The Orders of the Classes Monadelphia, Diadelphia, Polyadelphia, Gynandria, Monœcia, and Dicecia, are taken from the number and disposition of the stamens.

was my intention to continue a similar method throughout most of the Orders of the other remaining Classes; but on a more mature reflection, I thought it might be considered as innovating in some small degree on the Linnæan mode of arrangement; of which it is impossible for any one to have a more exalted admiration, than myself. The idea is therefore relinquished, and it is only suggested, as a more permanent improvement in the disposition of the Orders. The artificial and natural method of Classification in this arrangement, would blend more intimately. In the first thirteen Classes, the student in Botany, would refer *at once* to the Order, from the number of pointals or stigmas; and from the number and disposition of the stamens, in the 16th, 17th, 18th, 20th, 21st and 22nd Classes. There would be no necessity for several sets of Orders; one for great Britain and another for the plants of the whole globe; and it would not then be left to the arbitrary will of any one, at his own pleasure, to alter the original arrangement.—*Bu-
tomus*, agreeably to the Linnæan classification, is in the Hexagynia Order, or sixth of the ninth Class. I wish Linnæus had rested here, and had not formed a new series of Orders, which appears to be unnecessary. Hexagynia in this instance, according to his arrangement constitutes the *third* Order; for Great Britain, it stands in the *first* Order; and since the incorporation of the Classes, by Dr. Withering, it stands in the *second* Order.*

* Though an admirer of Dr. Withering's work, I cannot but

The Rule itself is absolute.—*Butomus* as it now stands in every British Flora will be continually liable to removal, on the discovery of new plants; but that would never be the case, if it was left in the place which Nature herself has appointed. The same rule holds good in most of the other Orders, as they are now arranged.

NOTE III.

In arranging the Orders to the British standard, the propriety of the regulation stated in the preceding note, is proved already. The improved state of British Botany, renders such an arrangement more peculiarly necessary at the present period; when the genera are so continually changing their places from one Class to another; when plants which have been introduced into this country (and are now naturalized) occupy Orders which heretofore contained no British species; and on the contrary, others are deprived of their situations, which may now become obsolete; ex. gr., *Pæonia*, *E. Bot.* t. 1513. Order 2, of the Class Polyandria, will now change the Orders of all the succeeding genera.* This will surely be sufficient to shew the lament, that he was ever induced to make so formidable a change in the Linnæan mode of classification.

* It may be asked, how, *Pæonia*, of the SECOND Order; *Delphinium*, of the THIRD; *Aquilegia*, of the FIFTH; and *Stratiotes* of the SIXTH; can with propriety be placed in the SAME Order.—See British Flora, and the systematic Index to the *E. Botany*.

propriety, if not necessity, of a more regular and permanent standard to go by; for which purpose, there can be no better arrangement than the *original* one by Linnæus; leaving all the unoccupied Orders open for future discoveries, &c.

NOTE IV.

I subjoin the specific characters of these two plants from the *Flor. Brit.* by which every difficulty in distinguishing them, seems to be cleared up.

CERAS'TIUM VULGA'TUM.—SP. CH. Hairy, viscid, growing in tufts; leaves ovate; petals even with the calyx; flowers longer than the peduncle.

CERAS'TIUM VISCO'SUM.—SP. CH. Hairy, viscid, diffuse; leaves lance-oblong. *Rufford.*

NOTE V.

The introduction of the following plants into this work is somewhat irregular; but as the greater part of them are indigenous or become naturalized to Great Britain, I hope that so trifling a deviation will be excused:—

VIZ.—Liriodendron Tulipifera.—Rheum Rha-
ponticum.—Aesculus Hippocastanum.—Asarum
Europæum.—Polemonium cæruleum.—Oenothera
biennis.—Delphinium consolida.—Althæa officina-
lis.

OBS.

The Oenothera is said to grow wild in Worcestershire. Rev. Mr. Bourne. See Withering, vol. 2. p. 361.

The Polemonium at Buxton, in Derbyshire. Mr. Wood. See Withering, vol. 2. p. 237.

Many more plants might have been added to a Midland Flora, if I had chosen to take them from the publications of old Authors; but excepting the above, there is not a single species throughout this work, which has not come under my own immediate observation, or whose habitat, has not been derived from the most respectable *living* authority.

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